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The Autocar

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a Car**

**Practical Advice
on Buying New
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A Car . . . for What it's Worth

ECONOMIC conditions in Great Britain are such that many more people than ever before are in a position to operate a car; whether it is wholly owned or used only for personal transportation is here irrelevant. This encouraging state of affairs is in one sense unexpected, because it coincides with a period when motor cars and motoring for the private individual are at their most expensive as a result of various forms of taxation.

British motor vehicle owners are subscribing about £500 million a year to the Exchequer in licence fees and purchase and fuel taxes. This works out at a little under £100 per motorist and commercial vehicle operator. We now have about 12 people per car and 19 vehicles per mile of road. These figures give a new motorist some idea of the company in which he will find himself—and its density. All complain bitterly, but have no doubt that motoring is here to stay.

Car ownership grows on you; those who do not drive or own a car have no appreciation of the convenience, pleasure and pride of ownership a car can bring. Within a few months of becoming motor-car owners the same people cannot imagine how they ever managed without one. In many parts of the world people have become wholly dependent on the car for daily transportation.

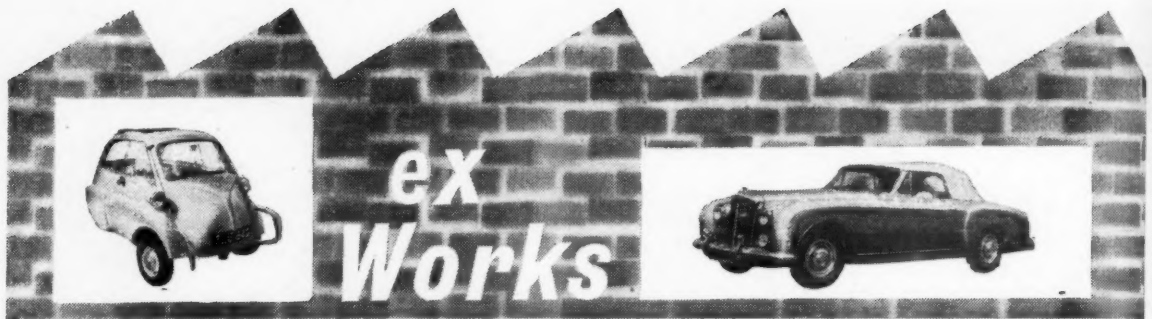
Almost everyone deceives himself or herself about costs, whether it be the weekly expense of cigarettes, drinks, clothes or motor cars. *The Autocar* from time to time discusses the costs of motoring, and occasionally publishes detailed records kept by motorists, but we know that even though the figures may be an accurate guide to such costs, a great number of readers will gloss over the items they prefer not to think about. Again, it is the unexpected repair bill which seems to hurt more than the steady drain of pocket into petrol tank, even though the latter figure may be much greater in the summary.

When costing motoring very closely, it is important to get all the relationships correct. A garage in London or Manchester may cost, say, £1 a week; would a car depreciate £52 a year more as a result of being left out in the open, *à la Americaine*? Is it cheaper for your total annual mileage to use a 1½-litre car that does 30 m.p.g. on premium fuel than a slightly larger one that does 27 m.p.g. on "pool"?

Advice . . .

LAST week, in a rather different context, we remarked that "selection of a car is such a personal matter." In the pages which follow we have avoided making specific recommendations, but there are several articles which are intended to guide anyone who is considering a change of car or the purchase of a new or used car for the first time. Pitfalls can await the gullible and unwary; most of them can be avoided by thinking ahead and taking good advice.

It would be strange if the staff of *The Autocar* were not enthusiastic motorists and, therefore, somewhat biased in favour of motoring, but we do not recall hearing of any individual who has regretted becoming a motorist, and of only very few who have begrudged the car's expense. If, on occasions, the motoring front appears a little black, it is worth reminding oneself that without a car, door-to-door travelling expenses are high, that you have to plan to suit someone else's timetable rather than your own, and that some of the most pleasant journeys and visits could not be made at all.



MORE THAN 100 MODELS ARE AVAILABLE ON THE HOME
MARKET IN A TAX INCLUSIVE RANGE OF £390 TO £7,494

Make and Model (Road Test date in brackets)	Basic Price			U.K. Total			C.c. and No. of cyls.	Gross b.h.p. @ r.p.m.	Max. torque lb ft @ r.p.m.	Compression ratio	Fuel consumption range m.p.g.	Performance					Gear change
	£	s	d	£	s	d						Mean max. m.p.h.	Standing 1 mile sec	0-30 m.p.h. sec	30-50 m.p.h. (top gear) sec	0-60 m.p.h. (top gear) sec	
Isetta (under 500 c.c.)	255	1	8	389	19	6	295 (1)	13.0 @ 5,200	—	7.0	—	—	—	—	—	—	R
Ford Popular (1-1-54)	295	0	0	443	17	0	1,172 (4)	30.1 @ 4,000	46.4 @ 2,400	6.2	32.0-40.0	58.5	26.3	9.3	18.5	—	C
Isetta 600	319	0	0	479	17	0	585 (2)	19.5 @ 4,000	28.0 @ 2,500	6.5	—	—	—	—	—	—	C
Goggomobil T300 (1-2-57)	329	0	0	494	17	0	293 (2)	14.8 @ 5,000	—	6.0	52.0-68.0	52.0	28.6	10.9	31.7	—	C
Berkeley Sports (24-5-57)	332	7	6	499	18	3	328 (2)	18.2 @ 5,250	21.6 @ 3,000	8.2	40.5-54.0	65.0	25.6	8.7	16.1	31.1	C
Fiat New 500 (20-9-57)	350	0	0	526	7	0	479 (2)	13.0 @ 4,000	20.2 @ 2,500	7.5	47.0-61.0	49.5	31.9	15.7	—	—	C
Zundapp Janus	370	0	0	556	7	0	250 (1)	14.0 @ 5,000	15.5 @ 4,800	6.7	—	—	—	—	—	—	C
Austin A.35 2-door (28-12-56)	379	0	0	569	17	0	948 (4)	34.0 @ 4,750	50.0 @ 2,000	8.3	38.0-48.0	70.1	23.5	6.5	13.4	28.1	C
Ford Anglia (26-2-54)	380	0	0	571	7	0	1,172 (4)	36.0 @ 4,500	52.0 @ 2,500	7.0	29.0-33.0	68.3	24.3	7.2	15.1	31.2	C
Berkeley 3-cylinder	381	15	4	573	19	10	492 (3)	28-30 @ 5,500	—	7.5	—	—	—	—	—	—	C
Citroen 2cv	389	0	0	598	7	0	425 (2)	12.0 @ 3,500	16.7 @ 3,000	7.0	—	—	—	—	—	—	C
Ford Prefect (17-12-54)	415	0	0	623	17	0	1,172 (4)	36.0 @ 4,500	52.0 @ 2,500	7.0	30.0-40.0	67.7	24.3	7.0	17.4	30.1	C
Morris Minor 1000 2-door (14-12-56)	416	0	0	625	7	0	948 (4)	37.0 @ 4,750	48.0 @ 3,000	8.3	36.5-48.0	72.8	24.2	6.8	18.2	31.3	C
Goggomobil TS300 coupé	416	0	0	625	7	0	293 (2)	17.0 @ 6,000	17.4 @ 3,800	6.0	—	—	—	—	—	—	C
Standard Eight (17-5-57)*	425	0	0	637	17	0	803 (4)	33.0 @ 5,000	42.5 @ 2,700	8.2	42.0-55.0	62.2	25.9	8.2	21.3	54.1	C
Fairthorpe Atomota	426	0	0	640	7	0	646 (2)	35.0 @ 5,700	36.1 @ 3,750	6.5	—	—	—	—	—	—	C
Fiat New 600	432	0	0	649	7	0	633 (4)	22.0 @ 4,600	28.9 @ 2,800	7.5	—	—	—	—	—	—	C
Ford Escort (30-12-55)	434	0	0	652	7	0	1,172 (4)	36.0 @ 4,500	52.0 @ 2,500	7.0	31.0-38.0	68.5	24.2	7.0	15.8	34.1	C
Standard Super Ten (29-3-57)*	435	0	0	653	17	0	948 (4)	35.0 @ 4,500	47.9 @ 2,500	7.5	36.0-48.0	65.0	26.0	8.1	18.9	30.1	C
Renault 750 (15-4-55)	437	0	0	656	17	0	747 (4)	21.0 @ 4,100	33.2 @ 2,000	7.2	48.0-56.0	61.0	25.9	8.5	20.1	—	C
Hillman Husky	465	0	0	698	17	0	1,265 (4)	36.0 @ 4,100	55.5 @ 2,200	6.6	—	—	—	—	—	—	C
Fairthorpe Electron Minor	479	0	0	719	17	0	948 (4)	38.0 @ 5,000	49.0 @ 2,800	8.2	—	—	—	—	—	—	C
Standard Pennant (7-2-58)	485	0	0	728	17	0	948 (4)	37.0 @ 5,000	50.0 @ 2,750	8.0	35.0-45.0	66.0	25.0	8.1	19.8	30.1	C
Vauxhall Victor (Super 21-6-57)	498	0	0	748	7	0	1,507 (2)	52.0 @ 4,200	84.5 @ 2,400	7.8	28.4-35.0	73.0	23.9	7.2	14.0	28.1	C
Morgan 4-4 Series II (14-7-56)	498	0	0	748	7	0	1,172 (4)	36.0 @ 4,400	52.0 @ 2,500	7.0	34.8-41.2	70.5	23.5	6.9	15.5	20.1	C
Metropolitan 1500 (Convertible, 14-6-57)	498	10	0	749	2	0	1,489 (4)	47.0 @ 4,100	74.0 @ 2,100	7.2	27.0-36.0	73.3	22.1	6.3	10.0	22.1	C
Volkswagen de Luxe (6-12-57)	505	0	0	758	17	0	1,192 (4)	36.0 @ 3,400	56.0 @ 2,000	6.6	33.0-40.0	61.0	24.6	7.3	22.6	—	C
Hillman Minx Series II de luxe (13-9-57)*	529	0	0	794	17	0	1,390 (4)	51.0 @ 4,400	72.0 @ 2,200	8.0	29.0-37.0	73.0	24.5	7.2	13.3	20.1	C
Renault Dauphine (Perlec clutch, 16-11-56)	530	0	0	796	7	0	845 (4)	26.5 @ 4,200	48.4 @ 2,000	7.2	39.0-44.0	65.5	25.4	8.5	16.5	45.7	C
Wolsley 1500 (31-5-57)	530	0	0	796	7	0	1,489 (4)	50.0 @ 4,200	74.0 @ 3,000	7.2	32.0-38.0	77.5	22.1	6.0	13.6	24.6	C
Fiat 600 Multipla (18-1-57)	532	0	0	799	7	0	633 (4)	21.5 @ 4,600	28.9 @ 2,800	7.0	38.3-45.0	54.0	29.7	12.3	—	—	C
Austin A.55 Cambridge (3-1-58)*	538	0	0	808	7	0	1,489 (4)	51.0 @ 4,250	81.0 @ 2,000	8.3	30.0-43.0	71.2	23.7	6.8	12.7	20.1	C
Ford Consul Mk. II (15-6-56)	545	0	0	818	17	0	1,703 (4)	59.0 @ 4,200	92.0 @ 2,300	7.8	26.5-33.8	75.2	23.1	6.4	12.7	25.1	C
Morris Cowley 1500	555	10	0	834	12	0	1,489 (4)	55.0 @ 4,400	78.0 @ 2,400	8.3	—	—	—	—	—	—	C
Skoda 440	575	0	0	863	17	0	1,089 (4)	40.0 @ 4,200	53.0 @ 3,200	7.0	—	—	—	—	—	—	C
Turner A.35 Sports	575	0	0	863	17	0	948 (4)	40.0 @ 4,800	52.0 @ 2,000	8.3	—	—	—	—	—	—	C
Fiat 1100 (19-4-57)	578	10	0	869	2	0	1,089 (4)	40.0 @ 4,400	51.3 @ 2,700	7.0	29.8-42.5	75.0	23.8	7.4	16.9	28.1	C
Morris Oxford Series III (25-10-57)	589	0	0	884	17	0	1,489 (4)	55.0 @ 4,400	78.0 @ 2,400	8.3	25.0-36.0	72.8	23.9	6.9	11.9	20.1	C
Simca Aronde Elysée (29-6-56)	592	0	0	889	7	0	1,290 (4)	48.0 @ 4,500	65.0 @ 2,800	6.8	29.4-33.0	74.2	23.3	6.3	15.0	24.1	C
Morgan Plus Four (Vanguard engine)	594	0	0	892	7	0	2,088 (4)	70.0 @ 4,300	112.0 @ 2,300	7.0	—	—	—	—	—	—	C
Singer Gazelle Series II	598	0	0	898	7	0	1,496 (4)	52.5 @ 4,500	76.6 @ 2,000	7.5	—	—	—	—	—	—	C
Standard Ensign (22-11-57)	599	0	0	899	17	0	1,670 (4)	60.0 @ 4,000	91.7 @ 2,200	8.0	28.0-37.0	75.3	22.9	6.3	14.8	25.1	C
Morris Isis Series II	607	0	0	911	17	0	2,639 (4)	90.0 @ 4,500	124.0 @ 2,000	8.3	—	—	—	—	—	—	C
Ford Zephyr Mk. II. (13-4-56)*	610	0	0	925	7	0	2,553 (6)	86.0 @ 4,200	136.0 @ 2,000	7.8	18.0-32.0	84.5	20.5	4.9	8.8	17.1	C
Simca Aronde Monthéry 58	616	0	0	925	7	0	1,290 (4)	48.0 @ 4,800	65.0 @ 2,800	7.8	—	—	—	—	—	—	C
Peugeot 203	633	9	1	952	8	2	1,290 (4)	45.0 @ 4,500	59.3 @ 2,500	7.0	—	—	—	—	—	—	C
Morgan Plus Four (TR engine)	645	0	0	968	17	0	1,991 (4)	100.0 @ 5,000	117.5 @ 3,000	8.5	—	—	—	—	—	—	C
Vauxhall Velox III	655	0	0	983	17	0	2,262 (6)	82.5 @ 4,400	124.0 @ 1,800	7.8	—	—	—	—	—	—	C
Wolsley Fifteen-Fifty (5-4-57)*	660	0	0	991	7	0	1,489 (4)	55.0 @ 4,400	78.0 @ 2,400	8.3	25.0-38.0	75.5	24.1	7.8	11.0	20.1	C
M.G. A (23-9-55)	663	0	0	995	17	0	1,489 (4)	68.0 @ 5,500	77.4 @ 3,500	8.3	25.0-38.0	98.0	20.2	4.9	12.3	15.0	C
Ford Zodiac II (8-2-57)*	675	0	0	1,013	17	0	2,553 (6)	88.0 @ 4,400	133.0 @ 2,000	7.8	18.5-29.5	83.0	22.5	6.2	11.1	20.1	C
Standard Vanguard III	675	0	0	1,013	17	0	2,088 (4)	68.0 @ 4,200	113.3 @ 2,000	7.5	—	—	—	—	—	—	C
Austin A.95 Westminster (25-1-57)*	689	0	0	1,034	17	0	2,639 (6)	92.0 @ 4,500	130.0 @ 2,000	8.2	18.0-28.0	90.0	21.8	5.8	20.5	19.4	C
Sunbeam Rapier Series II	695	0	0	1,043	17	0	1,494 (4)	73.0 @ 5,200	81.2 @ 3,000	8.5	—	—	—	—	—	—	C
Triumph TR3 (Hardtop, 11-1-57)*	699	0	0	1,049	17	0	1,991 (4)	100.0 @ 5,000	117.5 @ 3,000	8.5	21.1-31.9	102.0	18.7	3.7	10.2	12.3	C
Ford Taunus 12M	702	0	0	1,054	7	0	1,172 (4)	43.0 @ 4,250	54.7 @ 2,200	6.8	—	—	—	—	—	—	C
Panhard Dyna 58	702	8	8	1,055	0	0	850 (2)	42.0 @ 5,000	50.6 @ 2,250	7.2	—	—	—	—	—	—	C
M.G. Magnette (5-7-57)	714	0	0	1,072	7	0	1,489 (4)	68.0 @ 5,400	83.0 @ 3,000	8.3	23.0-30.0	86.5	21.2	5.1	11.7	18.5	C

*Overdrive, †Manual, ‡Automatic, §Standrive. †Nett. Quick conversions: 1,000 c.c. = 61 cu in; 100 lb = 45.4 kg; 10 in = 25.4 cm; 1 Imp. gal. = 1.2 U.S. gal.; 1.1 Imp. gal. = 5 litres; 10 m.p.g. (Imp.) = 28.25 litres/100 km.

18.5
31.7
6.1
3.4
5.1

7.4	1
8.2	3
—	—
1.3	5
—	—
—	—
5.8	3
8.9	3
0.1	—
—	—
—	—
—	—

1.0	29
1.5	29
2.0	29
2.6	
3.3	29
4.5	45
6.6	24
7.7	29
7.7	25

9	29
9	27
0	24
8	25
8	17.9

0	29.8
3	15.6
4	20.9
5	19.8
2	12.5

1.2 US

(Continued overleaf)

ex Works . . .

More than 100 models are available

The car has much appeal as a runabout. It can be parked facing the kerb in a very small gap without the tail protruding into the roadway any farther than would the side of a lorry placed in the orthodox way. The little car has sufficient height to be seen easily in congested conditions, and acceleration which at least enables it to keep up with the traffic flow in the cities. As with other tiny vehicles, there is more noise than that encountered in more orthodox cars. The ride and stability are surprisingly good, having in mind the short wheelbase and very narrow rear track. Economy is provided in all aspects of running, maintenance and repair costs.

Cheapest of the orthodox cars is the Ford Popular. Of unashamedly dated design (hence the low price) the car is harshly sprung but lively, roomy, rugged, inexpensive to maintain—and well known. Both of these cars remain under the £450 mark inclusive of purchase tax; and between £450 and £500 come the more powerful Isetta, the cheapest Goggomobil and the little Berkeley sports. The Goggomobil is an outstanding small car. While very small (overall length and width are but 9ft 6½in and 4ft 2½in respectively) it will seat three adults,

or two adults and up to three children. Road holding is exceptionally good by any standard, the rack and pinion steering is light and accurate, and the brakes have plenty in reserve whatever driving technique is used.

There is a similarity in character between the Goggomobil and the Berkeley, even though the latter has its engine at the front. Berkeley handling characteristics are very fine and, as a two-seater sports car with a slightly larger two-stroke engine, the performance is even more impressive. The maximum speed is 65 m.p.h., compared with 52 for the little saloon Goggomobil.

Competing in the next, under £600, bracket are the Fiat 500, Zundapp Janus, Austin A.35 two-door, Ford Anglia and Citroën 2cv. The foreigners suffer from import duties which are levied, before purchase tax is calculated, on the total wholesale price, with the result that they are at a disadvantage unless they offer something which the individual is prepared to pay for at a somewhat uneconomic price. Neither the Fiat nor Citroën can be called lively, yet both have great charm, and a driver need be no paragon of patience to tackle long journeys without becoming irritable or bored.

There is no appreciable difference in price between the A.35 and the Anglia, the two cheapest cars of modern, orthodox design. Their characteristics are well known; and while there is more room in the Ford, the Austin scores on fuel economy

Choice of British cars extends to foreign markets; exports are approaching half of total production. These are for the American West Coast

Make and Model (Road Test date in brackets)	Basic Price			U.K. Total			C.c. and No. of cyls.	Gross b.h.p. @ r.p.m.	Max. torque lb/ft @ r.p.m.	Compression ratio	Fuel consumption range	Performance				
												Mean max.	Standing 1 mile	0-30 m.p.h.	30-50 m.p.h. (top gear)	0-60 m.p.h.
	£	s	d	£	s	d					m.p.g.	m.p.h.	sec	sec	sec	sec
Ford Taunus 15M (20-7-56)	763	0	0	1,145	17	0	1,498 (4)	60.0 @ 4,500	81.7 @ 2,000	7.0	29.0-35.0	77.7	21.4	6.0	11.7	22.8
DKW 3-6 coupé (10-5-57)	765	0	0	1,148	17	0	896 (3)	40.0 @ 4,250	50.6 @ 2,000	7.0	31.0-42.0	81.5	23.1	6.2	16.2	22.5
Fairthorpe Electron	769	0	0	1,154	17	0	1,098 (4)	83.0 @ 6,800	72.0 @ 4,750	9.8	—	—	—	—	—	—
Fiat 1400B	774	0	0	1,162	7	0	1,395 (4)	58.0 @ 4,600	65.0 @ 3,700	7.5	—	—	—	—	—	—
Peugeot 403 (16-9-55)	796	2	11	1,195	11	5	1,468 (4)	58.0 @ 4,900	75.0 @ 2,500	7.0	28.0-34.0	76.0	23.0	6.8	14.9	24.0
Austin-Healey 100 Six (2-11-56)*	817	0	0	1,226	17	0	2,638 (6)	102.0 @ 4,600	142.0 @ 2,400	8.2	20.0-27.0	103.0	18.8	4.3	10.6	12.9
Standard Vanguard Sportsman (31-8-56)*	820	0	0	1,231	7	0	2,089 (4)	190.0 @ 4,500	122.0 @ 2,500	8.0	22.0-34.0	86.0	21.7	5.4	10.0	17.6
Austin A.105 (12-7-57)†	825	0	0	1,235	17	0	2,639 (6)	102.0 @ 4,600	142.0 @ 2,400	8.2	17.5-27.5	94.5	22.0	6.4	7.9	18.3
Borgward Isabella	830	0	0	1,246	7	0	1,493 (4)	60.0 @ 4,700	79.5 @ 2,400	7.0	—	—	—	—	—	—
Humber Hawk (28-6-57)	840	0	0	1,261	7	0	2,267 (4)	78.0 @ 4,400	120.0 @ 2,300	7.5	25.0	83.0	21.8	5.5	11.0	20.6
Wolseley Six-Ninety (15-3-57)†	850	0	0	1,276	7	0	2,639 (6)	97.0 @ 4,750	135.0 @ 2,000	8.3	18.7-27.6	89.0	22.3	6.8	12.8	20.3
Rover 60 (13-7-56)	883	0	0	1,325	17	0	1,997 (4)	60.0 @ 4,900	101.0 @ 2,000	6.9	24.0-33.0	75.1	23.6	6.9	13.0	27.9
Riley Two-Point-Six (20-12-57)	940	0	0	1,411	7	0	2,639 (6)	101.0 @ 4,500	141.5 @ 2,500	8.3	15.5-25.2	93.0	20.6	5.2	11.6	17.4
Borgward Isabella TS	950	0	0	1,426	7	0	1,493 (4)	75.0 @ 5,200	84.6 @ 2,800	8.2	—	—	—	—	—	—
Rover 75	963	0	0	1,445	17	0	2,230 (6)	80.0 @ 4,500	113.0 @ 1,750	7.2	—	—	—	—	—	—
Jaguar 2.4 (21-9-56)*	966	0	0	1,495	7	0	2,483 (6)	112.0 @ 5,750	140.0 @ 2,000	8.0	19.0-27.0	102.5	20.5	5.0	9.6	15.8
Rover 90 (20-1-56)*	999	0	0	1,499	17	0	2,638 (6)	93.0 @ 4,500	138.0 @ 1,750	7.5	21.0-28.0	89.7	21.6	5.5	11.1	19.3
Renault Frégate Transfluide (14-2-58)	1,027	10	0	1,542	12	0	2,141 (4)	80.0 @ 4,000	124.0 @ 4,000	7.5	17.5-26.5	79.7	25.2	8.1	16.4	31.5
Rover 105S (22-2-57)*	1,088	0	0	1,633	7	0	2,638 (6)	108.0 @ 4,250	152.0 @ 2,500	8.5	17.7-25.0	95.0	20.4	5.5	9.7	17.9
Armstrong Siddeley Sapphire 346	1,100	0	0	1,651	7	0	3,435 (6)	125.0 @ 4,700	182.0 @ 2,000	7.0	—	—	—	—	—	—
Jaguar 3.4	1,114	0	0	1,672	7	0	3,442 (6)	210.0 @ 5,500	216.0 @ 3,000	8.0	—	—	—	—	—	—
Daimler Century†	1,119	2	0	1,680	0	0	2,433 (6)	100.0 @ 4,400	130.0 @ 2,500	7.7	—	—	—	—	—	—
Lancia Appia Series II	1,125	0	0	1,688	17	0	1,090 (4)	43.5 @ 4,800	56.0 @ 3,000	7.2	—	—	—	—	—	—
Citroën DS19 (7-12-56)	1,150	0	0	1,726	7	0	1,911 (4)	75.0 @ 4,500	101.3 @ 3,000	7.5	21.6-28.4	87.1	22.9	6.6	20.8	22.1
Rover 105R de Luxe (9-8-57)*	1,155	0	0	1,733	17	0	2,638 (6)	108.0 @ 4,250	152.0 @ 2,500	8.5	18.0-24.0	89.5	24.5	9.8	12.9	25.2
Jaguar XK150 (2-1-58)*	1,175	0	0	1,763	17	0	3,442 (6)	210.0 @ 5,500	216.0 @ 3,000	8.0	16.0-24.0	123.7	16.9	2.8	6.2	8.5
A.C. Ace	1,188	0	0	1,783	7	0	1,991 (6)	90.0 @ 4,500	110.0 @ 2,500	8.0	—	—	—	—	—	—
Mercedes-Benz 180 (4-1-57)*	1,195	0	0	1,793	17	0	1,897 (4)	74.0 @ 4,700	104.0 @ 2,800	6.8	—	—	—	—	—	—
Jaguar Mark VIII (4-1-57)*	1,219	0	0	1,829	17	0	3,422 (6)	190.0 @ 5,500	203.0 @ 3,000	8.0	15.0-22.0	106.5	18.4	4.4	8.2	11.6
Mercedes-Benz 190	1,250	0	0	1,876	7	0	1,897 (4)	84.0 @ 4,800	107.0 @ 2,800	7.5	—	—	—	—	—	—
Chevrolet Bel-Air	1,265	0	0	1,898	17	0	3,860 (6)	140.0 @ 4,200	210.0 @ 2,400	8.0	—	—	—	—	—	—
D.B. Rally	1,299	2	0	1,950	0	0	850 (2)	55.0 @ 5,700	50.6 @ 4,000	8.0	—	—	—	—	—	—
Allard Palm Beach (Jaguar)	1,300	0	0	1,951	7	0	3,442 (6)	210.0 @ 5,750	213.0 @ 4,000	8.0	—	—	—	—	—	—
Lotus Elite	1,300	0	0	1,951	7	0	1,216 (4)	83.0 @ 6,300	75.7 @ 4,500	10.0	—	—	—	—	—	—
Alfa-Romeo Giulietta Berlina	1,320	0	0	1,981	7	0	1,290 (4)	52.0 @ 5,200	68.7 @ 3,000	7.5	—	—	—	—	—	—
Porsche 356 A-1600 (4-5-56)	1,330	0	0	1,996	7	0	1,582 (4)	70.0 @ 4,500	81.2 @ 2,800	7.5	29.0-36.0	101.2	19.5	4.9	14.0	15.3
Ford Fairlane 500 (26-7-57)*	1,377	0	0	2,066	17	0	4,458 (8)	176.0 @ 4,400	264.0 @ 2,400	7.1	14.9-18.0	90.5	20.0	5.0	6.8	15.1
Nash Rambler station wagon (6-4-56)*	1,440	0	0	2,161	7	0	3,205 (6)	120.0 @ 4,200	170.0 @ 1,600	7.5	19.0-25.0	75.5	22.0	5.3	8.8	20.7
A.C. Aceca (6-7-56)*	1,446	0	0	2,170	7	0	1,991 (6)	90.0 @ 4,500	110.0 @ 2,500	8.0	18.8-25.0	102.0	19.1	4.4	9.7	13.4
Daimler One-O-Four (12-4-57)*	1,595	15	4	2,395	0	0	3,468 (6)	137.0 @ 4,400	191.0 @ 2,000	7.6	17.0-23.0	96.0	23.0	5.6	9.0	17.3
Lotus Le Mans 75 (30-11-56)	1,625	0	0	2,405	4	0	1,098 (4)	83.0 @ 6,800	74.5 @ 4,400	9.8	44.0-58.0	111.7	17.9	4.0	—	10.9
Oldsmobile Super 88 (31-1-58)*	1,620	0	0	2,431	7	0	6,077 (8)	305.0 @ 4,600	410.0 @ 2,800	8.4	11.0-19.0	113.5	17.1	3.7	3.8	10.2
Plymouth Savoy (23-3-56)*	1,718	0	0	2,578	7	0	4,500 (V-8)	187.0 @ 4,440	265.0 @ 2,400	8.0	13.0-20.0	93.2	19.4	4.7	5.2	13.7
Jensen 541R (17-1-58)*	1,910	0	0	2,866	7	0	3,993 (6)	—	—	7.6	15.0-24.0	123.5	17.5	3.7	6.6	10.6
Mercedes 190SL (10-1-58)	1,930	0	0	2,896	7	0	1,897 (4)	120.0 @ 5,700	107.0 @ 2,800	8.5	20.0-26.0	106.8	17.8	4.9	11.7	13.3
Lagonda 3-litre (13-1-56)	1,995	0	0	2,993	17	0	2,922 (6)	140.0 @ 5,000	178.0 @ 3,000	8.2	16.0-19.5	100.0	20.5	4.8	10.5	15.8
Dodge Custom Royal (27-9-57)*	2,040	0	0	3,061	7	0	5,323 (8)	245.0 @ 4,400	320.0 @ 2,400	8.5	12.0-16.0	108.0	16.6	3.7	6.6	11.5
Aston Martin DB Mark III (27-12-57)*	2,050	0	0	3,076	7	0	2,922 (6)	116.0 @ 5,500	180.0 @ 4,000	8.2	16.0-22.0	119.0	17.4	3.5	7.4	9.3
Fraser-Nash Gran Turismo	2,166	0	0	3,250	7	0	2,580 (8)	140.0 @ 5,000	—	7.8	—	—	—	—	—	—
Lancia Aurelia Gran Turismo (8-11-57)	2,230	0	0	3,346	7	0	2,451 (V-6)	118.0 @ 5,000	126.5 @ 3,500	8.4	21.0-27.0	110.0	19.6	4.9	10.2	14.0
Alvis Graber (22-3-57)	2,300	0	0	3,451	7	0	2,993 (6)	104.0 @ 4,000	163.0 @ 2,500	8.0	17.0-20.0	102.0	19.8	4.4	8.6	13.5
Bristol 405	2,390	0	0	3,586	7	0	1,971 (6)	105.0 @ 5,000	123.0 @ 3,750	8.5	—	—	—	—	—	—
Bentley Series S (7-10-55)†	3,695	0	0	5,543	17	0	4,887 (6)	—	—	6.6	13.0-16.0	101.0	19.7	4.4	5.9	14.2
Mercedes 300SL Roadster	3,750	0	0	5,626	7	0	2,996 (6)	250.0 @ 6,200	228.0 @ 5,000	9.5	—	—	—	—	—	—
Rolls-Royce Silver Cloud	3,795	0	0	5,693	17	0	See Bentley Series S.	—	—	—	—	—	—	—	—	—
Bentley Continental Park Ward drop-head coupé (21-12-56)†	4,995	0	0	7,493	17	0	4,887 (6)	—	—	8.0	14.0-18.0	119.2	18.8	4.3	5.2	12.9

*Overdrive. †Manual. ‡Automatic. §Standrive. ¶Nett. Quick conversions: 1,000 c.c. = 61 cu in; 100 lb = 45.4 kg; 10 in = 25.4 cm; 1 Imp. gal. = 1.2 U.S. gal.; 1.1 Imp. gal. = 5 litres; 10 m.p.g. (Imp.) = 28.25 litres/100 km.



	Transmission	Engine	Horsepower	Top speed, m.p.h.	0-60 sec.	Position of steering wheel	Forward speed	Highest overall ratio	Smallest turning circle	Dimensions				Approx. curb weight with 5 gals and 2 passengers	B.h.p. per ton laden	Weight distribution per cent	Cubic capacity of luggage space approx.	Rear seat leg room	Starting handle	Heater standard	Upholstery material	Floor covering
										Overall length	Overall width	Ground clearance	Wheelbase									
(3)			4.1	37	6	160	62	6	98	2,310	58.2	55.0	—	7	No	No	Cloth	Rubber	—			
(4)			4.2	36	0	166	66	7	92	2,317	38.6	57.3	—	8	—	Yes	—	—	—			
(4)			4.5	32	0	144	60	7	82	1,546	120.2	—	7	—	No	No	Vynide	Carpet	—			
(4)			4.4	35	0	170	65	6	104	2,828	45.9	—	14	10	No	Yes	Vynide	Carpet	—			
(4)			4.4	31	0	175	66	7	104	2,650	49.0	53.0	15	12	Yes	Yes	Leathercloth	F, Rubber; R, Carpet	—			
(6)*			4.1	35	0	157	60	5	92	2,803	81.1	49.0	—	7	No	No	Hide	Carpet	—			
(3)			4.5	35	0	173	67	7	102	3,080	65.5	57.8	14	9	Yes	Yes	Hide	Carpet	—			
(4)			3.9	40	0	180	62	7	105	3,423	66.8	58.0	14	12	Yes	Yes	Hide	Carpet	—			
(4)			3.9	36	1	173	67	7	102	2,497	54.1	—	—	10	No	Yes	—	—	—			
(4)			4.2	39	0	184	69	6	110	3,542	49.3	58.3	19	11	Yes	No	Vynide	Carpet	—			
(4)			3.9	36	9	188	67	7	113	3,830	58.4	54.0	11	8	Yes	Yes	Leather and Leathercloth	Carpet	—			
(4)			4.3	37	0	178	65	7	111	3,416	39.3	53.4	—	9	—	Yes	Leather	Carpet	—			
(4)			3.9	36	9	185	67	6	113	3,806	60.0	53.7	11	10	Yes	Yes	Leather and Leathercloth	Carpet	—			
(4)			3.9	36	1	173	67	7	102	2,497	67.4	—	—	10	No	Yes	—	—	—			
(4)			4.3	37	0	178	65	7	111	3,565	50.3	—	—	9	—	Yes	Leather	Carpet	—			
(5)*			4.5	35	0	180	66	7	107	3,374	74.4	57.2	13	9	No	Yes	Leather	Carpet	—			
(5)*			4.3	37	0	178	65	7	111	3,735	55.7	55.7	—	10	Yes	Yes	Leather	Carpet	—			
(4)			3.9	31	6	185	67	7	110	3,400	52.8	56.5	—	11	No	Yes	Cloth and plastic	Rubber	—			
(5)*			3.3	37	0	178	65	7	111	3,780	64.0	55.3	—	11	Yes	Yes	Leather	Carpet	—			
(4)			4.1	42	6	193	72	8	114	4,036	64.2	—	17	13	Yes	Yes	Leather	Carpet	—			
(4)			3.5	33	6	180	66	7	107	3,454	136.2	—	13	10	No	Yes	Leather	Carpet	—			
(4)			4.1	33	0	178	66	7	104	3,612	62.0	—	18	14	Yes	Yes	Leather	Carpet	—			
(4)			4.2	32	6	157	55	6	98	2,240	43.5	—	8	9	No	Yes	Cloth	F, Rubber; R, Carpet	—			
(4)			3.3	36	1	189	70	6	123	3,063	55.0	67.0	—	15	No	Yes	Leather	Carpet on rubber	—			
(4)			3.6	37	0	178	65	7	111	3,836	63.0	56.3	—	11	Yes	Yes	Leather	Carpet	—			
(5)*			3.2	33	0	177	64	7	102	3,646	184.3	52.0	—	—	No	Yes	Leather	Carpet	—			
(4)			3.6	36	6	152	59	6	90	2,056	98.0	—	—	6	—	Yes	No	Leather	Carpet	—		
(4)			3.9	36	0	175	68	9	104	2,896	57.2	—	—	—	No	Yes	Cloth and Texleather	Rubber	—			
(4)			4.3	38	0	196	73	7	120	4,390	97.0	53.0	17	8	No	Yes	Leather	Carpet	—			
(4)			4.1	35	0	176	68	8	105	2,981	63.1	—	—	—	No	Yes	Cloth and Texleather	Rubber	—			
(3)			3.5	41	6	200	74	6	115	3,636	86.2	—	25	13	No	No	Tattercloth and Vinyl	Carpet	—			
(3)			5.8	31	0	160	63	6	85	1,766	64.2	—	—	—	No	Yes	Nylon and Leatherette	Carpet	—			
(4)			3.5	35	0	162	63	6	96	2,736	171.9	—	—	4	—	No	No	Leather	Carpet	—		
(4)			4.5	36	0	144	58	6	88	1,540	120.7	—	—	20	—	No	Yes	Hide	Carpet	—		
(4)			4.5	36	1	154	60	6	94	2,268	88.0	—	—	20	10	No	Yes	Cloth	Carpet	—		
(4)			4.4	36	0	155	65	6	83	2,128	73.7	44.6	—	7	No	Yes	P.V.C.	Rubber	—			
(4)			3.1	40	0	207	77	7	118	4,067	96.9	56.1	29	12	No	Yes	Cloth	Rubber	—			
(4)			3.1	38	0	198	71	8	108	3,584	75.0	53.2	13	14	No	No	Nylon and vinyl	Carpet	—			
(7)*			3.2	34	0	160	61	6	90	2,492	80.9	46.4	8	Yes	Yes	Leather	Carpet	—				
(4)			3.9	42	0	196	70	7	114	4,500	68.2	51.1	15	13	Yes	Yes	Leather	Carpet	—			
(4)			4.2	42	0	134	60	5	85	1,355	137.2	53.9	—	—	No	No	Vynide	None	—			
(4)			3.2	42	0	208	78	6	122	4,832	141.1	55.5	—	15	No	No	Moroccan and cloth	Carpet	—			
(4)			3.5	40	2	204	72	7	115	4,012	104.2	56.8	35-40	13	No	No	Cloth and vinyl	Carpet	—			
(5)*			3.6	34	6	176	63	7	105	3,598	—	—	—	17	20	Yes	Yes	Leather	Carpet	—		
(4)			3.9	34	6	166	68	6	94	2,761	97.0	51.0	—	—	No	Yes	Cloth and Texleather	Rubber	—			
(4)			4.6	38	0	196	69	7	113	4,116	76.0	45.2	16	9	Yes	Yes	Hide	Carpet	—			
(5)*			3.4	43	8	212	78	5	122	4,256	129.0	56.0	35-40	15	No	No	Cloth and vinyl	Carpet	—			
(5)*			2.9	35	0	171	65	5	99	3,283	110.4	51.5	18	9	Yes	Yes	Hide	Carpet	—			
(4)			3.4	—	—	To choice	99	—	—	—	—	—	—	—	No	No	Leather	Carpet	—			
(4)			3.7	32	9	172	61	6	104	3,185	83.0	47.9	15	4	No	Yes	Cloth	Rubber	—			
(4)			3.8	39	6	189	66	7	111	3,619	64.4	52.2	16	7	Yes	Yes	Leather	Carpet	—			
(4)			4.2	37	0	191	68	6	114	3,081	76.3	—	17	10	Yes	Yes	Leather	Carpet	—			
(4)			3.4	41	8	211	74	7	123	4,542	—	51.0	—	11	No	Yes	Leather	Carpet	—			
(4)			—	37	6	180	70	5	94	3,336	167.9	—	—	—	No	Yes	Cloth and Texleather	Rubber	—			
Automatic			2.9	41	8	210	72	7	123	4,312	—	50.7	—	8	No	Yes	Leather	Carpet	—			

ex Works . . .

More than 100 models are available

and performance. Between £623 17s and £650 appear, in rising price order, the Ford Prefect, Morris Minor 1000 two-door, the pretty T300 Goggomobil coupé, Standard Eight, Fiat 600 and the 3-cylinder Berkeley. The last-mentioned should have a remarkable performance for such a small car, but production on an appreciable scale awaits the supply in quantity of the new power unit. It is early days, too, for the Fairthorpe Atomota.

The Prefect is essentially a de luxe Anglia, and the Fiat may be judged in relation to the 500. Special interest attaches to the Minor and Standard Eight; although well known to thousands, they fall within the most popular price range. Each offers comfortable, brisk and economical motoring for up to four adults, with ample luggage room for most purposes save, perhaps, an annual holiday for a car-load of adults. The Standard and Minor have the advantage of a rear seat backrest which can be moved to extend the luggage locker into the rear seating compartment when there are not more than two occupants.

The Morris Minor has a slightly larger engine which provides markedly good acceleration. It will reach 60 m.p.h. in 31.3sec, for example, compared with 54.4 for the Standard, and has a maximum of 72.8 m.p.h. (62.2 m.p.h. for the Standard). Road holding is exemplary. On the other hand there is a little more leg room for passengers in the rear of the Standard, and more width across the front seats. Again, the m.p.g. range of the Standard is a very creditable 42 to 55, compared with 36.5 to 48 for the Morris Minor. Both cars have proved robust and economical to maintain.

Just over the £650 mark are the Ford Escort, Standard Ten and Renault 750, and the Hillman Husky in its new form remains just under £700. The Escort is an estate car version of the Anglia, and both have three-speed gear boxes. The popularity of this type of body is on the increase, and the Escort is a good example of functional styling. The little car, rather hard sprung, has considerable load space when the rear seat is folded and, of course, may be used as a normal four-seat saloon when required.

The Standard Ten was tested in its Super form, complete with two-pedal (Standrive) control and with overdrive. Top speed was not much better than that of the Eight, at 65 m.p.h. (in top and overdrive), but 60 m.p.h. was reached in 38.1sec. The engine of the Ten, at 948 c.c., is the same size as that of the Morris Minor, and the fuel consumption is also virtually the same at 36 to 48 m.p.g.

The little rear-engined Renault 750 has been in production for many years, and is certainly another car to have earned high praise for economy. The four-seater coachwork is rather cramped, but many buyers are prepared to put up with worse sins than that for "real" motoring at no less than 48 to 56 m.p.g. The new Hillman Husky is a size up in estate cars compared with the Ford Escort, and now has an o.h.v. engine instead of the original side-valve which Hillman had in production for many years. A full Road Test of this model will appear in a forthcoming issue.

There are ten models available at prices ranging between £700 and £800, of which the most costly, at £799 7s, is the Fiat Multipla, a most intriguing type of estate car powered by the 600 engine. As the engine is at the rear back doors cannot be fitted, but the conception as a whole is far more than a means of getting round the difficulty of the engine position. The driver sits well forward, in the manner of the seating positions in many commercial vehicles. Fully laden, the Multipla is anything but sprightly.

Popular family cars in this group include the new Standard Pennant, of which a full Road Test appeared as recently as 7 February, the Vauxhall Victor, Volkswagen de luxe, Series II Hillman Minx, Renault Dauphine and Wolseley 1500. The Pennant may be described as a smartened up, two-colour version of the Standard Ten. The Victor, however, is very nearly the cheapest 1½-litre saloon on the market. The only 1½-litre cheaper than the Victor is the 2-seat Metropolitan, built by the Austin company. Originally to a Nash specification, the Metropolitan has a particularly soft suspension of the type favoured in the U.S.A. This naturally influences the home buyer.

Both offered in the U.K. at a price of £796 7s, the Renault Dauphine and Wolseley 1500 are exceptional cars. The former is basking just now in the reflected glory of its near relation

which won the recent Monte Carlo Rally; it is rear engined, pretty and economical (39 to 44 m.p.g.). In standard form the 845 c.c. engine gives a top speed of 65.5 m.p.h., but the acceleration is not so impressive, 60 m.p.h. being reached in 45.7 sec. The road holding and steering are excellent.

The Wolseley 1500 is exceptional value for money. It is a comfortable four-seater and the standard of finish is very high, including thick floor carpets and polished woodwork. There are separate front seats, central gear change, four doors and inbuilt roadworthiness. Other virtues include a close ratio gear box, 32 to 38 m.p.g. and 77.5 m.p.h. The final sentence of the Road Test commented: "Here, indeed, is high quality at the right price."

The standard model of the Volkswagen is not pushed by sales staffs outside Germany, the mechanical brakes and austere finish being relatively unattractive though excused by the low price. In some countries the standard car is not offered at all, and in the United Kingdom very few are sold in comparison with the well finished, pleasant to drive de luxe model, which has hydraulic brakes and a superior standard of trim and of detail fittings. The car has changed only in detail since its introduction and rapid rise to fame. A full Road Test of the current version appeared a couple of months ago (6 December).

With the exception of one or two foreign cars with duty inflated prices, the list of family models costing more than £800 includes the larger cars with room for six adults. Particularly good value is provided by the Series II Ford Consul at nearly £820, for its 1,703 c.c. engine provides good performance and upwards of 30 m.p.g. in normal driving. It is a full six-seater, and the amount of luggage space is such that it prompted The Scribe to list the contents when one of his friends set off on a camping holiday.

In close competition is the Austin A.55, £10 10s cheaper, a four-five seater, made sprightly by its B.M.C. 1½-litre power unit. The Morris Cowley, latest in a line of famous cars, is still awaited for test, but its more expensive stablemate, the Oxford Series III, has been put through its paces. This car also uses the B.M.C. 1½-litre unit which gives entirely satisfactory performance and fuel consumption figures. The Morris claim of quality is upheld by the Oxford, the finish being impressive for a model in this price range.

Still on the right side of £900 are the Singer Gazelle and Standard Ensign. The former at present retains the 1½-litre overhead-camshaft engine used by the original Singer company before it was taken over by Rootes. The body, like those of all Rootes cars, is very attractive, and in the Gazelle a high degree of luxury is imparted by the choice of upholstery and trim materials. The Standard Ensign is a newcomer, tested last November following its introduction at the London Motor Show in the previous month. Similar in size and style to the well-known Vanguard, the Ensign is cheaper and has a smaller, 1,670 c.c. engine. The model has a distinct personality of its own. The driving position is very comfortable, and the model scores over the earlier Phase III Vanguards with its four-speed gear box with central change, and with its improved road holding. This car has plenty of appeal.

The remaining British family cars in large-scale production and with a total price still within three figures are the Morris Isis, Ford Zephyr, Vauxhall Velox and Wolseley Fifteen-Fifty. The Isis is the largest Morris, but as yet it has not been possible to obtain the current model for full test. The Velox is a new model whose smart appearance and specification have caused quite a stir. This, too, is awaited with keen interest.

The Ford Zephyr is, of course, similar to the Consul mentioned earlier, except that its longer bonnet houses a six-cylinder, 2,553 c.c. engine. The performance is good, the car is fast and safe, and at extra cost overdrive or fully automatic transmission is available. The Wolseley Fifteen-Fifty is similar in appearance to the M.G. Magnette, and is a successor to the Four-Forty-Four. It is another quality built 1½-litre saloon, commendable for honest construction. It has already won a reputation for standing up to hard service. It is available with two-pedal, Manumatic control.

The more costly cars are naturally made and sold in rather smaller numbers, although several enjoy excellent export sales. We do not propose to discuss their individual merits here; each has a character of its own and most are offered with a choice of body styles, transmission and desirable extras.

For those in the fortunate position of being about to buy a new car there is certainly no lack of choice. And for those who propose instead to buy secondhand, there is a special guide elsewhere in this issue.

MORE THAN 30 British and foreign cars of all types, are included in The Autocar Road Tests, 1958, to be published on 18 March at 7s 6d

A full-bodied sporting coupé for two, the Jaguar XK150 has the well-bred road manners and agility that its lines suggest



Autocar ROAD TESTS 1674

Jaguar XK150

IN The Autocar of 17 October 1952, a Road Test of a Jaguar XK120 fixed head coupé showed that the car would reach 50 m.p.h. in 7.5sec and 80 m.p.h. in 17.1sec. It had a maximum speed in top gear of 121 m.p.h. and weighed 27 cwt. Three years later the XK140 produced comparable figures of 7.5 and 16.9sec; the best speed in direct top was 111 m.p.h., and the car weighed 28 cwt. This car was fitted with an overdrive which operated on top gear, and an ultimate 129.5 m.p.h. was recorded.

The latest version—the XK150—has a slightly lower maximum speed than that of the XK140, but it has noticeably superior acceleration and more room in the restyled body—two valuable assets. The specification of the special equipment model XK150 (costing £117 basic more than the standard model) includes Dunlop disc brakes, wire wheels, a dual-exhaust system and the Blue Top 210 b.h.p. engine. The standard version has drum brakes and disc wheels, and its engine develops 190 b.h.p.

The manner in which this Jaguar goes about its business is impressive. The times recorded for the standing start acceleration tests are among the best obtained by this journal. The concrete surface of the Ostend-Brussels motor road was damp at the time and wheelspin was unavoidable, but the way in which the twin-overhead camshaft engine launched the car into the distance was quite memorable.

Completely smooth, with a turbine-like flexibility right up the speed range, this famous engine proved itself capable of a freak demonstration. Starting from rest with top gear engaged, the XK150 reached 100 m.p.h. in 36.4 sec. A little clutch slip was permitted to get the car rolling and then, as the engine revolutions built up, the car gathered speed quietly with no signs of protest such as pre-ignition or vibration. Exhaust noise is almost inaudible, and in this respect alone the car is very restful when driven fast. On a suitable modern motor road, the Jaguar will cruise steadily at 110-115 m.p.h. in overdrive. On one journey in England 57 miles were covered in the hour.

The Blue Top head of the special equipment engine has the larger valves of the C-type unit, but this does not result in a loss of torque in the lower speed range. Thus the XK150 is a tractable top gear car.

Its extra weight and increased frontal area (18.2 sq ft compared with the 17.5 sq ft of the XK140) are countered by the added power. The ability to surge in top gear from 30 to 50 m.p.h. or from 60 to 80 m.p.h., for example,

is very restful. The car will trickle smoothly and economically through traffic without the need for constant gear changing; moreover, driven comparatively slowly on English roads with the maximum speed kept below 80 m.p.h., a very creditable fuel consumption of 22 m.p.g. was recorded. Best economy, with full use of overdrive, was 24 m.p.g.

The use of high cruising speeds on Continental roads, with 115 m.p.h. indicated often on the speedometer, brought the figure to 18.5 m.p.g. For hard driving on winding British roads, using the ready power to rush past slower-moving traffic, consumption was 16 m.p.g.

Cold weather starting was instantaneous, even when the car was covered with thick frost after a night in the open; the twin S.U. HD6 carburettors have an auxiliary starting instrument which cuts in according to engine temperature, and the functioning of this auxiliary unit can be detected as a faint hissing which ceases as normal operating temperature is reached. The mixture became over-rich before the starting carburettor cut out, and it was advisable to run the engine fast for a few minutes to clear it. The engine responds immediately at all times to a suddenly opened throttle, and there is no power roar. The carburettor intakes are effectively silenced by a large air cleaner mounted within the right front wing valance. An S.U. electric petrol pump is located rather inaccessibly for maintenance on the outside



A wide, curved rear window surmounts a tail liberally spread with chromed fittings. The quarter-lights are hinged for ventilation. Twin exhaust pipes betray special equipment specification

Jaguar XK150...

Disc brakes all round and wire wheels with centre-lock hubs are fitted to the special equipment model. To aid forward vision, the bonnet has a pronounced downward rake from a high scuttle



of the right chassis member. The 14-gallon fuel tank has an inadequate filler, which will not accept the full flow from a garage pump. When the tank was replenished, petrol fumes were noticed inside the car.

First gear is normally used to get the car moving from rest; second, into which the lever has a comparatively long travel, has a very potent usable range up to 58 m.p.h., with still a little to spare before the rev counter needle reaches the limit of 6,000 r.p.m.; there is, however, a noticeably large gap between the lower two ratios. Third, with its high maximum, is so quiet that on more than one occasion the driver was unaware that he had omitted to change up in traffic. The movement between the ratios is sweet, but the synchromesh mechanism on the car tested was scarcely adequate. In order to engage a gear silently with the car stationary it was necessary fully to depress the clutch pedal, which has a long travel. The clutch action was light, and there was no sign of unpremeditated slip during the testing. On full throttle standing starts there was no clutch judder, but there were occasional indications of axle wind-up. Normal upward or downward changes with the car in motion required full disengagement of the clutch, and double-declutching was desirable.

Fitted as an extra, the overdrive is worth every penny of its cost. Its function is more that of a fifth gear than what is usually understood as an overdrive. It is controlled by a neat lever switch mounted on the right of the fascia, and it can be used at any speed. Occasionally during the performance testing there was a slight lag before the overdrive cut in. In most instances when the switch was moved at full throttle in top gear, the Laycock unit could be sensed rather than felt as it cut in. It enables long distances to be covered with a minimum of effort and fuel consumption.

Disc brakes of Dunlop manufacture are fitted to the Jaguar XK150 special equipment models, fore and aft, and their hydraulic actuation is assisted by a Lockheed vacuum

servo. Their behaviour is superb, and the fade-free retardation always available permits an experienced driver to travel very quickly with confidence. The pedal pressures are light for normal use and have a desirable progressive increase up to maximum effect. Brake manufacturers consider that 1 lb of pedal effort per cent braking efficiency is a good design target—and this the XK150 approaches. There is no squealing at any speed.

The car pulled up square on wet or dry roads, completely free from judder or shake. Friction pad adjustment is automatic as wear takes place. Naturally, if the clutch is freed and the engine stalls, there is no vacuum assistance and extra pedal effort is required. The servo as fitted to the XK150 disc brake system does not deprive the driver of sensitivity of control.

Additional pads are applied mechanically on the rear wheel discs by the handbrake lever. Their power was not up to the high standard of the footbrakes, even when applied hard, they would not hold the car on a steep gradient. The lever, of the fly-off type, is adjacent to the transmission cover.

Suspension is free from roll and pitch, and on smooth roads the ride is comfortable at any speed. Even on Continental pavé, with the tyres inflated to high-speed pressures, there is no discomfort. No tyre squeal is heard when cornering fast, and on wet roads the car remains as though glued to the road in a most reassuring fashion. Of course, if the power is applied at the wrong time when cornering the back end will break away, but the driver senses that the car, correctly handled, will take care of him.

On rough roads some feed-back is transmitted through the steering wheel, but not to an unpleasant degree. The first-class steering is positive and reasonably light, with immediate response to the driver's movements; at slow speeds there is little self-centring action. At high speeds, the directional stability adds to the crew's confidence.

Control of the car is assisted materially by the driving

Left: Direct forward vision is unimpeded by the screen pillars. Deep overriders for the substantial bumpers protect the car from aggressive parking tactics. The frontal aspect has been kept agreeably clean and simple. Right: Neatly finished but rather shallow, the luggage compartment can be extended forward when a hinged flap above the rear squabs is lowered. The spare wheel sits in a covered recess beneath the luggage



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Mainly for children, the rear accommodation also provides extra luggage space. Trim is in leather of first-class quality. A four-spoked wheel with comfortable finger grips has a telescopic mounting on the steering column. Handbrake and gear lever are adjacent between the seats



position. The four-spoke wheel is set at a near vertical angle, and is adjustable on its column for reach. The driving seat has a wide range of fore and aft adjustment, so that drivers of different leg lengths can be seated comfortably. The back rest is set fairly upright and the range of adjustment enables an alert and comfortable attitude to be adopted. A little more lateral support from both cushion and squab would be appreciated.

One of the important improvements in this latest, more refined XK model, is the increase of body width to give four more inches at shoulder height. The new wide, one-piece curved screen provides excellent visibility with little interference from the raked pillars. The top of each side lamp can be seen by the driver, and the red inset in the back of each lamp body indicates the car's width at night.

The long range beam of the head lamps allows speeds of up to 100 m.p.h. to be reached at night on suitable roads with safety. The roadsides also are well lit, and the dipped beam does not upset approaching traffic whilst providing sufficient illumination for kerbside cyclists. A reversing lamp is provided.

There is no apparent distortion through the sides of the windscreen, but it reflects the leather covering of the fascia. High-speed motoring in the rain is made difficult when wind pressure tends to lift the wiper blades off the glass. A more firmly sprung blade arm would surely cure this—now an annoying fault on several fast cars which have curved screens. A two-speed wiper motor is supplemented by an induction-operated screen wash. The wipers do not clear the curved ends of the screen.

The speedometer is obscured by the left hand when holding the wheel; apart from this, the instruments are legible and within easy vision from the driving seat although the main dials would be better located in front of the driver.

The twin loud-tone, high-frequency horns are operated by a push-button in the steering wheel boss. It is unusual for a Jaguar not to have a polished veneer fascia and window rails, but the matching leather trim of the panel is tastefully carried out. There is a small, open cubby on the driver's side, and, on the opposite side, a similar compartment with lockable lid.

A plated grab handle is provided for the passenger's use, and there is ample seat adjustment on this side. Both the seat backs are hinged to allow access to the small rear compartment, but it seems a pity that the backrests are not adjustable for rake. The doors have no check stays and their lower edges easily become jammed on the average kerb or verge. On level ground, clearance of the tips of the doors is 9in unladen; camber and weight of crew reduce this to only 3 or 4in. It is not possible to lock either door from the inside, and there are no door pulls. A hinged ashtray is fitted low down in each door, and there is a tendency to knock one's knuckles on the open trays when operating the window winding handles.

A familiar power unit on the world's sports-racing circuits, the twin-o.h.c. 3.4-litre engine has a splendid external finish. Items for routine servicing are mostly accessible though not the twin batteries in the wings behind the front wheels

Included in the standard equipment is a recirculatory heating and demisting system. This proved capable, with the assistance of the somewhat noisy booster fan (with no rheostat speed control) of keeping the screen clear, but the majority of the heat was directed to the driving side of the interior. It is understood that an improved heating system is likely to be in production by the time this report appears. With the front quarter lights open, a draught from the scuttle vents was felt, but this could be avoided to some extent by opening the rear windows. With any window open, the car was remarkably free from wind noise. Hand-operated fresh air inlets are provided at each side.

Behind the seats is space, on two small padded cushions, for two children or, transversely, one adult. Legroom naturally is severely limited—footroom even more so—and this accommodation can fairly be regarded as for emergencies only. The whole floor is trimmed with carpet which fits neatly. Below the rear window is an interior lamp which is lit when either door is opened, or which can be operated by a fascia switch. A map light on the fascia would be an appreciated addition.

The XK150 has only a shallow luggage compartment, but as the car is primarily a two-seater, the space behind the seats provides adequate extra capacity. A flap to which the rear seat squabs are attached hinges forward to allow lengthy items such as golf clubs to be carried. The compartment floor, which is unobstructed, is covered with a mat. Below is the spare wheel and a space for tools.

The luggage compartment lid has a recessed lamp and is locked by the glove box key. The supporting strut for the lid takes up valuable space in the locker when the lid is closed.



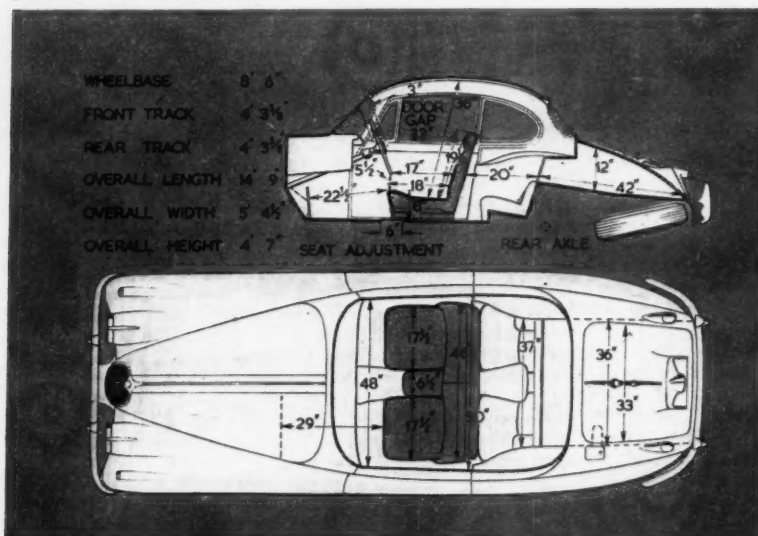
Jaguar XK150...

Twelve chassis points require lubrication every 2,500 miles, in addition to the usual checking of oil levels. No starting handle is provided. Beneath the bonnet, the engine oil filler orifice in the exhaust camshaft cover is within easy reach, and the oil reservoirs for the clutch and brake master

cylinders are accessible. Two 6-volt batteries are fitted, one in each front wing.

The Jaguar XK150 is undeniably one of the world's fastest and safest cars. It is quiet and exceptionally refined mechanically, docile and comfortable. As with most cars, there are a few body details which could be improved, but we do not know of any more outstanding example of value for money.

JAGUAR XK150



Measurements in these $\frac{1}{2}$ in to 1 ft scale body diagrams are taken with the driving seat in the central position of fore and aft adjustment and with the seat cushions uncompressed

PERFORMANCE

ACCELERATION: from constant speeds.

Speed Range, Gear Ratios and Time in sec.

M.P.H.	3.18 to 1	4.09 to 1	4.95 to 1	7.16 to 1	12.18 to 1
10-30	—	7.4	5.5	3.5	2.5
20-40	—	6.4	4.7	3.3	—
30-50	—	6.2	4.7	3.5	—
40-60	9.1	6.3	5.0	—	—
50-70	9.9	6.5	5.1	—	—
60-80	11.0	7.1	5.8	—	—
70-90	13.1	8.0	7.4	—	—
80-100	17.4	10.2	—	—	—
90-110	22.9	13.8	—	—	—

*Overdrive.

From rest through gears to:

M.P.H.	sec.
30	2.8
50	6.5
60	8.5
70	11.4
80	15.0
90	19.5
100	25.1
110	33.5

Standing quarter mile, 16.9 sec.

SPEEDS ON GEARS:

Gear	M.P.H. (normal and max.)	K.P.H. (normal and max.)
Overdrive	(mean) 123.7 (best) 125.5	198.9 201.9
Top	(mean) 114.0 (best) 115.0	183.4 185.0
3rd	70-91.0	113-146
2nd	45-62.0	72-100
1st	18-33.0	29-53

TRACTION RESISTANCE: 20lb per ton at 10 M.P.H.

SPEEDOMETER CORRECTION: M.P.H.

Car speedometer:	10	20	30	40	50	60	70	80	90	100	110	120
True speed:	12	20	29	38	48	56	66	76	86	96	106	116

TRACTION EFFORT:

	Full (lb per ton)	Equivalent Gradient
Overdrive	250	1 in 8.9
Top	344	1 in 6.4
Third	440	1 in 5.0
Second	612	1 in 3.6

BRAKES: (from 30 m.p.h. in neutral)

	Efficiency	Pedal Pressure (lb)
	31 per cent	25
	58 per cent	50
	75 per cent	75
	94 per cent	100

FUEL CONSUMPTION:

20.5 m.p.g. overall for 950 miles. (13.78 litres per 100 km.)

Approximate normal range 16-24 m.p.g. (17.6-11.7 litres per 100 km.)

Fuel, premium grade.

WEATHER: Bright and frosty, later dull with fog patches, damp surface.

Air temperature, 35-45 deg. F.

Acceleration figures are the means of several runs in opposite directions.

Traction effort and resistance obtained by Tapley meter.

Model described in *The Autocar* of 24 May, 1957.

DATA

PRICE (basic), with fixed head coupé body, £1,292.

British purchase tax, £647 7s.

Total (in Great Britain), £1,939 7s.

Extras: Radio £35 approx.

Overdrive, £67 10s.

ENGINE: Capacity: 3,442 c.c. (210 cu in). Number of cylinders: 6.

Bore and stroke: 83 x 106 mm. (3.26 x 4.17 in).

Valve gear: two overhead camshafts.

Compression ratio: 8.0 to 1.

B.H.P.: 210 (gross) at 5,500 r.p.m.

(B.H.P. per ton laden 184.3).

Torque: 216lb ft at 3,000 r.p.m.

M.P.H. per 1,000 r.p.m. on top gear, 19.6.

M.P.H. per 1,000 r.p.m. on overdrive, 25.1.

WEIGHT: (with 5 gals fuel), 28½ cwt (3,226lb).

Weight distribution (per cent): F, 52; R, 48.

Laden as tested: 32½ cwt (3,646lb).

Lb per c.c. (laden): 1.06.

BRAKES: Type: F. and R., disc.

Method of operation: hydraulic, vacuum servo assisted.

Disc dimensions: F, 12in diameter; 276 sq in swept area.

R, 12in diameter; 276 sq in swept area.

Friction area: F, 15.9 sq in. R, 15.9 sq in.

TYRES: 6.00-16in.

Pressures (lb sq in): F, 23; R, 26 (normal).

F, 30; R, 35 (for fast driving).

TANK CAPACITY: 14 Imperial gallons.

Oil sump, 15 pints.

Cooling system, 23 pints.

TURNING CIRCLE: 33ft (L and R).

Steering wheel turns (lock to lock): 2½.

DIMENSIONS: Wheelbase: 8ft 6in.

Track: F and R, 4ft 3½in.

Length (overall): 14ft 9in.

Height: 4ft 7in.

Width: 5ft 4½in.

Ground clearance: 7½in.

Frontal area: 18.2 sq ft (approximately).

ELECTRICAL SYSTEM: 12-volt; 64

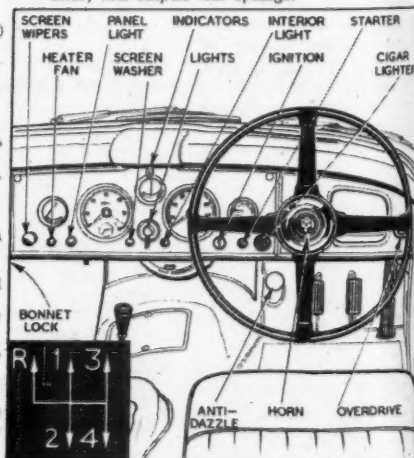
ampere-hour battery.

Head lights: Double dip; 60-36 watt bulbs.

SUSPENSION: Front, independent, wish-

bones and torsion-bars with anti-roll bar.

Rear, half-elliptic leaf springs.





SPEED FOR SALE

The Chequers Speed Shop, near Camberley, offers self-service to amateur car-builders and tuners

A SIGN of the times is the growing number of engine tuning and suspension conversion sets placed on the market to add power and stability to standard production models—from sporting two-seaters to family limousines. There are already many establishments about the country which offer to tune your car on their premises, or to despatch a set of conversion parts to you. Many of these sets are in stock and on display at the Chequers Speed Shop, which lies on the Portsmouth Road (A.325) a few hundred yards from its intersection with A.30 between Bagshot and Camberley, in Surrey.

Here you can drive up with your car, stroll around the display shelves and study catalogues of prices and performance claims, then place your order—it is rather like visiting a high-class tailor and selecting a material. A fundamental difference is that you can, if you wish, take the material away and do your own tailoring.

A third channel open to you is to make use of the self-service facilities offered—whereby you do your own tailoring on the firm's premises, with experts around ready to give advice and assistance. Self-service extends even to the complete building of a car from scratch, and is charged at 5s per hour up to 6 p.m. and 6s thereafter—advice and working equipment inclusive. There are no garaging charges; you pay only when on the premises.

There is a small machine shop with an expert machinist in attendance for lathe work, heavy drilling and milling.

Architect and managing director of this Speed Shop is Barry Eaglesfield, one of whose hobbies in the past was to leave no Bugatti unturned. Works manager is G. A. Upton, whose association with motor cars began with the Lanchester Motor Co. at the turn of the century; thus the restoration of a Veteran or Edwardian car could be committed to no one more able or knowledgeable on the subject.

Maybe your interests are less mechanical: you want only to *hear* motor cars? Then there is a wide selection of gramophone records guaranteed to make all the authentic noises. Or to *eat* off them and *drink* out of them? There are full sets of motoring crockery. Or just to *look* at them? There are decorative wall-papers, fabrics, framed pictures, books... Barry Eaglesfield has thought of everything. It is worth a visit.



Upper and lower left: Everything from contemporary motoring wallpaper and crockery to ancient lights. Upper right: G. A. Upton inspects a dismantled Veteran's engine and B. Eaglesfield (lower right) considers two carburettors for a Standard. Below: Motoring tune-up wares are displayed to advantage





HOLLAND LEADS OFF

NEW MODELS DISPLAYED IN FIRST
BIG EUROPEAN SHOW OF 1958

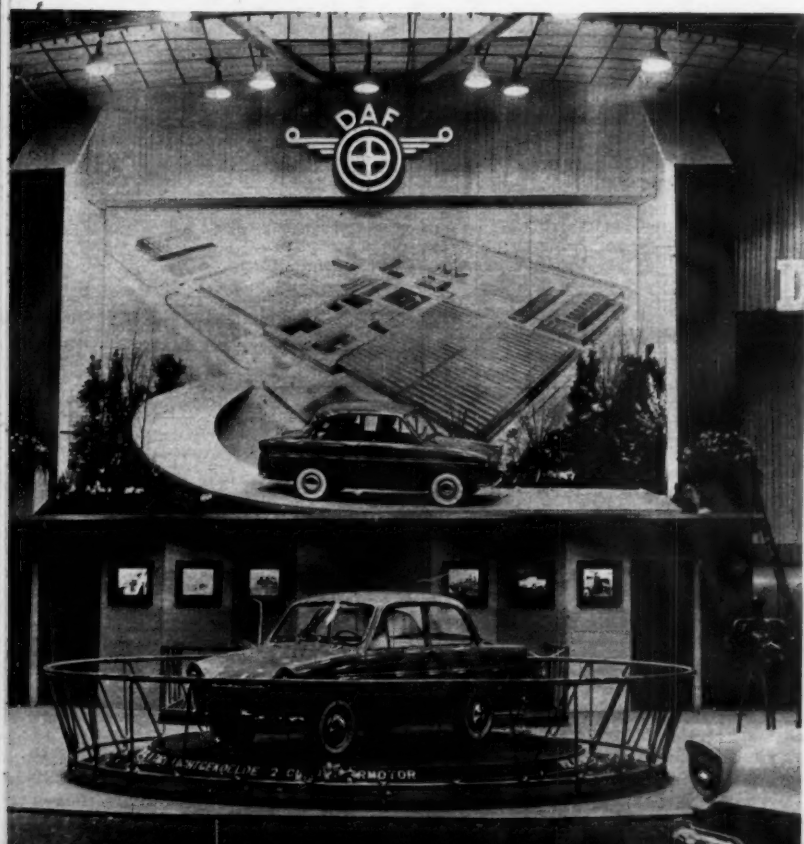
OWING TO THE cancellation of the Brussels Motor Show again this year, Amsterdam last week started the 1958 series of international exhibitions, and Holland gained distinction in re-entering the car market with its new design by DAF. This car will invade the most competitive section of the European market and offers, in particular, automatic transmission together with very low price.

The Autocar has visited the DAF factory at Eindhoven, and in this issue are included road impressions of the new Dutch model, due off the production line towards the end of the year.

In addition to the DAF, the Dutch were able to show for the first time in Europe the majority of 1958 American models. British industry also provided some firsts for international exhibition in the 1½-litre Sunbeam Rapier and its relative, the new Hillman Husky. There was also the Triumph TR3 and, new to Netherlanders, the Vauxhall Velox and Cresta.

(Continued on page 277)

Visitors entering the Show saw first the four-seater Ford Thunderbird on their left, with its angular roof lines, and the Vauxhall Cresta to their right (above). At the far end of the aisle was the new DAF, whose stand is seen (left)





Fords from three countries: nearest the camera is the Ford-derived Vedette (now Simca), the Dagenham Zodiac, and then the estate car version of the German Taunus



The four-seater Thunderbird is striking when seen from front or rear

Morris (right) had one of the largest stands in the Show, with the Minor 1000 featured in this garlanded arch. Dutch flags were attached to the front wings



Goggomobil have made an estate car version of their van (above); the Hillman Estate Car, a well-proportioned four-door (right); Chevrolet (below) feature sculpturamic sides for 1958; and Vauxhalls, popular in Holland, obtained orders in quantity for their new Cresta (bottom right) and Velox



HOLIDAY PLANNING

To Germany in an A.30

PARTY OF FOUR IN THE BLACK FOREST

WE are proud owners of a 1956 Austin A.30 two-tone saloon, and it is not surprising that after a successful holiday in Devonshire we should decide to venture abroad with it. Way back in the gloom of winter we began planning where to go and whom to take. My wife and I had no difficulty in persuading friends to accompany us. They had never been to the Continent before, but we had already spent many holidays in France, Belgium, Switzerland and Austria. We had not been to Germany, however, and we thought it time to rectify this omission. Having decided on Germany, the Black Forest became a natural choice.

Enquiries were sent to the information bureaux to be found in all Black Forest villages and, before January was out, my bedroom began to fill up with glossy pamphlets, all highly coloured, and all appealing strongly to the open air wanderer. Eventually we decided on Titisee, on a lake in beautiful surroundings 3,000ft above sea level; here we could be sure of fresh, pine-scented air, the greatest tonic I know for jaded city workers.

There are a few really smart hotels at Titisee and perhaps about 20 others, but long ago we discovered that it is more interesting to stay at village inns; not only do you get far better value for money but in addition you are able to absorb something of the nature of the region. We chose a small country inn just outside the village and the letter of confirmation was received in London just six months prior to the departure date. (If readers contemplating a Black Forest holiday wonder if it is necessary to book so early, the answer is that in fact there seemed no need to book at all—everywhere we went we found accommodation available.)

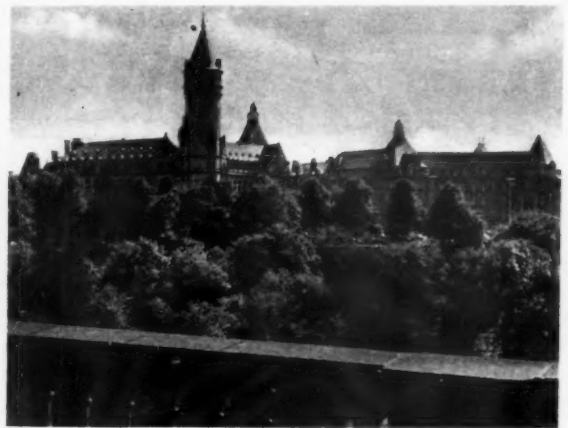
Now came the choice of route. Most people take one of the short sea routes to Calais or Boulogne and then tear across France as fast as they can. We chose the longer Dover-Ostend crossing, as we feel that it is part of the holiday, and I wanted to renew old acquaintances at Le Coq sur Mer, a Belgian seaside resort north of Ostend. My wife Gwendoline wanted to visit Brussels, and my friend's wife Marjorie had always wished to see Luxembourg. Her husband George had no say in the matter, Our route, therefore, became obvious—Ostend, Brussels, Dinant,

Luxembourg, Strasbourg and Freiberg. For the return journey we decided to follow the Rhine valley as far north as time would allow, and then cross Belgium to Brussels and Ostend. The Automobile Association attended to the documentation, and finally we were on the way.

George is a motor mechanic; in all his adult life he has owned a car and for most of the time he has been servicing Austins. He *knows* they are good and really reliable, but now he was really to see for himself, so we appointed him driver and I became navigator.

We left Coq sur Mer on the Sunday morning, and soon were on the *autostrade* which leads 70 miles straight into Brussels; we were there in under one and a half hours. In the afternoon we crossed the grape growing region of Brabant; at frequent intervals along the main road there were stalls where plump ladies were selling even more plump grapes. We stopped to buy a bunch and, not knowing at first what type to select, we were pressed to sample a grape from every bunch. Finally we decided on some large white grapes, as big as plums, at about 5s lb.

We joined the River Meuse at Namur and followed it as far as Dinant where we arrived early in the evening. This is a very attractive place so we decided to spend the night there and were soon accommodated in a hotel-restaurant right on the riverside. We were glad to stretch our legs, and a walk round the town was most welcome. Gwendoline discovered that leather bags are a good buy, and so George had to part with 195.00 Belgian francs (£1 8s)—this on the first day!



Royal Palace of Luxembourg—"we wished we could have spent three days in the city"

The hotel bill for dinner, bed and breakfast, including wine, beer, coffee after dinner and four Thermos flasks of coffee to take away, came to 431 Belgian francs, averaging 15s 4d per person.

Next day we left Dinant via the Lesse Valley and crossed the well-wooded Ardennes to Neufchateau for a picnic lunch, and then on to the city of Luxembourg, which we reached early in the afternoon. We spent three hours there, but we wished it could have been three days. However, we had a journey before us and after tea we set off again, heading south for the French frontier post at Frisange. We soon passed through Metz and stayed the night at a small village near Sarrebourg. Here again we had excellent accommodation and the bill for dinner, bed and breakfast was 4,130 French francs, or 17s 6d per person.

On the Tuesday we were away before nine and were soon through Strasbourg and over the Pont du Rhin, where we entered Germany. It was a pleasant drive through tobacco fields as far as Freiberg, a beautiful town with excellent shops

"... Panorama from the Feldberg, at 4,500ft ..."





The little Austin catches the eye, parked in Lenzkirch, a village in the Black Forest

and an interesting cathedral. We noticed, incidentally, that parking meters were installed in the Rathausplatz.

Leaving Freiberg, we entered the Black Forest and after climbing a continuous 20 miles up the Hollental (the Valley of Hell) we reached Titisee about teatime. We soon found our little whitewashed inn, and did full justice to the sumptuous meal which was awaiting us. The total outward journey from Ostend was 444 miles.

The next eight days were a sheer delight. We found lakes, waterfalls, gushing streams, Alpine crocuses, wild raspberries and always, wherever we went, the villages were decorated with flowers, mostly geraniums and dahlias. Wayside shrines everywhere were decorated with fresh flowers. Every village has its parish church, and outside the villages there are numerous chapels, just large enough to seat six or eight people, all whitewashed and all beautifully decorated with murals and, of course, fresh flowers. Here in this region was the peace for which we had longed.

The main occupation of the villagers is—timber. The young men fell the pines, and the older men carve all kinds of objects—cuckoo clocks mostly, but also figures for the church, musical boxes, and signposts such as we had never seen before, all carved and hand painted.

Everywhere we went we were well received, and the young people were particularly interested in our A.30. One boy wanted to know how much it cost, and when I converted the price into marks and told him that our model was about 6,300 marks, he was lost for words and muttered that I must be very rich. I hadn't the heart to disillusion him, but I found that his new Volkswagen cost him about £199!

Our accommodation at the inn was all we could wish for; it was spotlessly clean, with running water in all bedrooms, and even sockets for electric razors. Meals consisted of the usual Continental breakfast, with midday meal and evening dinner bigger than we could comfortably cope with. The price was only nine marks per day (15s) per person in August, reduced to eight marks (13s 4d) per day in September.

One day we crossed the frontier into Switzerland and visited the magnificent Rhine Falls at Schaffhausen. We also ascended the Feldberg by cable car to see the panorama spread out below us, extending over France, Germany, Switzerland and Austria. At 4,500ft the air was particularly invigorating.

Eventually we had to say *Auf wiedersehen* and head north-

wards. For more than 100 miles we travelled through the Black Forest and ultimately descended to the Rhine Valley at Baden-Baden. From here we followed the Rhine through Karlsruhe to Heidelberg, an attractive town nestling under wooded hills. From Heidelberg we drove via Worms and Mainz to Bingen, where a wine festival was just beginning. This town was at one time so notorious for the drinking habits of its people that it gave rise to the expression "going on a Binge."

After Bingen we still followed the Rhine, twisting and turning between vine-clad hills to Koblenz. Here we turned westwards over wooded hills (a continuation of the Belgian Ardennes), entering Belgium near Malmédy, and on through Spa and Liège to St. Trond, in the Flemish-speaking part of Belgium.

We found an hotel in the Grote Mark, opposite the Town Hall; we had not then realized that the clock would chime every quarter-hour through the night, nor did we anticipate that the church across the road would join in by playing "Rock of Ages" on the carillon at 5.30 a.m.!

The next morning found us in Brussels, a delightful city where we found a very bold plan to ease the traffic congestion in progress. The departmental stores were of great interest to the ladies.

Meanwhile George and I went in search of some tools he wanted to take home—we found what he wanted at a price of about £8, compared with £20 at home. We met for lunch in one of the stores, and had a really good meal with beers and coffee for 300 Belgian francs—about 10s 6d each. This was our only restaurant lunch—on all other days we picnicked.

We left Brussels by the *autostrade* and were soon back at Coq sur Mer on the coast, where we stayed overnight, having covered 586 miles on the return journey.

Over the whole holiday we averaged 53 m.p.g., and although we were always heavily laden and there were many hills to climb, the A.30 took everything in its stride; I do not think we ever had to change down to second gear. We came home full of enthusiasm for this type of holiday, and if these comments persuade other A.30 owners to do likewise, I am sure that they will get as much fun as we did. From the figures given it will be seen that a touring holiday abroad need not be expensive—it depends entirely on how you set about it.

R. A. STANLEY.



The removal of a bad hood from a good car (R. Knight), and the new hood in place



BEAUTY CULTURE

ALTHOUGH the buyer of a bad car must spend his time in keeping it going, owners of good used cars are interested in restoring them to perfect condition. This review is concerned with products and services for that purpose. There are many good firms; but not all are as useful to the amateur as those here selected. It is bodywork that is mainly discussed, not mechanical overhaul.

HOODS AND UPHOLSTERY

THE hood of a good used car quite often is found to be unsatisfactory. If it is cloth, it may have discoloration which will not yield to a thorough wash with detergent and a soft brush (of boot-brush stiffness, not a damaging kitchen scrubber), and spots may resist clothes-cleaning fluid.

Cloth hoods are rubberized; sometimes an otherwise sound one has the rubberizing destroyed by sunshine, and lets through damp. Obviously, reproofing with rubber is better than an attempt to paint; and one cannot use tent dressings, because their paraffin wax basis would upset remaining rubber.

There is a useful preparation for this purpose—Maxol, made by Grangersol, Ltd.; it costs 9s 6d a pint. One pint should do for a clear dressing, but if the fawn, maroon, grey, blue or white kinds are used, then two coats are needed, and a second tin might be required. To the big city owner, one might suggest dark-coloured new hoods.

Plastic hoods usually clean up perfectly with detergent and a soft scrub, but city smog does seem to have the ability to stain and discolour them in an indelible way, and they may have slight surface wear. These hoods are always p.v.c.-coated (polyvinyl chloride plastic) and a

dressings for this will be mentioned when we come to restoring seats and upholstery.

As to new hoods, we may define the materials commonly used. Duck is a sort of cotton canvas, inexpensive and reliable, though of plain appearance. Mohair is that rather fine, glossy cloth used by coachbuilders. Generally speaking, p.v.c. plastic-coated cloth in a good brand (Everflex, or Vynide, for instance) is the most practical.

Rayon, less often used, is a synthetic material, though it appears as woven cloth. It is less subject to attack by smog than natural materials, and it is virtually immune to rotting from dampness, so it must be held superior to duck for town use, and open air parking.

At one time coupés and convertibles had double hoods with enormous amounts of shaped padding, and these were, of course, expensive to renew, but the modern convertible and tourer can have a hood that is very easy to replace. Indeed, some firms stock "ready made" which can be fitted at home, and these have been observed to be most satisfactory, and good value.

It is possible to resurface leather and leathercloth upholstery with Nuagane lacquer. This differs from other paints in being perfectly flexible when dried, and it does not crack, even on seats; in time, however, it may reproduce cracks

already existing in the treated leather or leathercloth.

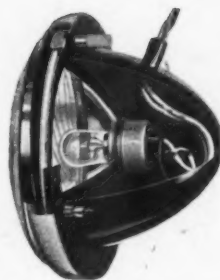
The cure for hopelessly worn or stained cloth upholstery is renewal, or concealment under loose covers.

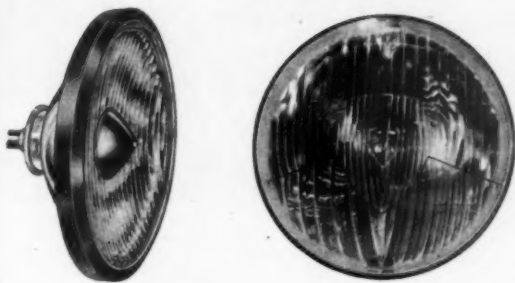
The cellulose-based version of Nuagane is intended for leather and for nitro-cellulose leathercloth, of which the most famous brand is Rexine; such cloths are generally though not always correctly called Rexine by the public. On leathercloth Nuagane, because of its excess of solvents, slightly dissolves and plasticizes the old material, rejuvenating it, achieving good bonding and restoring the material to a perfect appearance. It spreads too well to retain brushmarks.

On leather it is equally reliable, but when a car has beautiful natural leather, as distinct from the coated kind used in many popular cars, it should perhaps be left natural and "leathery," even if shabby.

Cellulose leathercloth in modern cars is used mostly for trim panels and so on. The tougher p.v.c.-coated fabric is more often used for seats. One may distinguish thus: a little nail varnish or cellulose thinners will dissolve the surface of cellulose cloth, but not p.v.c.

For p.v.c. there is a special Nuagane called Revec, a plastic-based paint. It has not been tested yet by *The Autocar*, but it is reported to be as good as the leather and Rexine lacquer.





Replacement head lamp units. Left to right: Lucas F700, Notal Hilité, and Marchal Optique



A Connell seat, as used by Lotus; and Decosol cleaning fluid for upholstery and hood leathercloths, which costs 5s 6d



These preparations cost 12s a pint. There are smaller and larger containers.

Some notes on major suppliers of hoods, and upholstery generally, follow:—

Car Trimming Co. (Slough), Ltd., make ready-made hoods, besides tailored ones. A double-texture cloth hood for a Minx convertible costs £9 10s, as an example; p.v.c. plastic is 25 per cent more. Their range of "ready made" is unusually wide. Services provide for carpets, seats, headlinings, and so on. A catalogue lists all the different kinds of screws, piping, and similar trimmers' necessities, quoting prices for small quantities for the private owner.

Hood colours are fawn, stone, grey, red, maroon, blue, green and black.

Connell Bros. provide for all British open models with what they call template-tailored hoods; these are of duck, rayon, or p.v.c. We have seen one fitted by an owner, and it was very good. A hood for a modest-sized four-seater costs £9 in duck, £12 in rayon or p.v.c. The firm also fits hoods at its works. All other upholstery services are provided, including materials.

There are inexpensive but properly cushioned and p.v.c.-covered bucket seats at £2 15s upwards. This company makes the smart and comfortable seats used in the Lotus sports and racing cars.

R. Knight make duck hoods for as little as £6 10s fitted, Vynide ones being slightly more, and, of course, such ancillaries as sidescreens. Their hoods are of good quality.

Industrial Cover Co. charge for the small Standard and Morris tourers £12 for duck hoods, and £14 for Vynide. Hillman Minx, Morris Minor 1000 and Ford Consul hoods are £13 10s duck, £18 Vynide. Larger cars cost more to re-hood. Other services are wool interior headlinings for saloons (£9 upwards), seat retrimming from £4 per seat, tonneau covers and parking covers.

London Trimming Co. make good ready-made hoods for nearly all open models, with return-of-post despatch. They are surprisingly easy for amateurs, or garages without an upholsterer, to fit in place without wrinkles. A typical price

is £9 for a Minx convertible hood in duck, £12 in p.v.c.-coated or mohair. There are also ready-made carpets, in a variety of colours, and besides the hood and carpet services, this company acts as a shop, willing to sell retail all the materials and bits and pieces used in building or restoring bodywork. The catalogue is useful, such items as zip fasteners and complex rubber sections for windscreens being included.

Restall Bros.—Most of the replacement seats one sees for cars and small vans are very austere. A better kind, in some cases superior to the car maker's original equipment, has been traced to this firm. Good p.v.c. upholstery material seems to be used, and there are durable and deep cushions. Single seat prices start at £9. Conversion seats for vans and estate cars are another field; and there is a comprehensive carpet service.

CAR TRIMMING CO. (SLOUGH), LTD., 82, Bath Road, Slough, Buckinghamshire.

CONNELL BROS., 693, High Road, Leyton, London, E.10.

GRANTHURST LTD., Imperial Way, Watford, Hertfordshire.

R. KNIGHT, 30, North Street, Carshalton, Surrey.

INDUSTRIAL COVER CO., 22, Queens Mews, Bayswater, London, W.2.

LONDON TRIMMING CO., LTD., 40, Queen's Gate Mews, London, S.W.7.

NUAGANE PRODUCTS, LTD., 19, Soho Square, London, W.1.

RESTALL BROS., Stoney Lane, Birmingham, 12.

Decosol fluid: CHAS. HANSON AND SON, LTD., Brighouse, Yorkshire.

LAMPS

THE usual practice of owners in improving older cars is to meet the inadequacy of the head lamps, which may have perished reflectors, by the purchase of expensive auxiliary lamps. But the proper role of such lamps is for some special purpose; fog lamps are too short-ranged, and spot lamps too narrow-beamed, to make good head lamps. It is cheaper, and better, to replace the lens-

A hood by the London Trimming company, using flexible plastic for the rear window and quarters

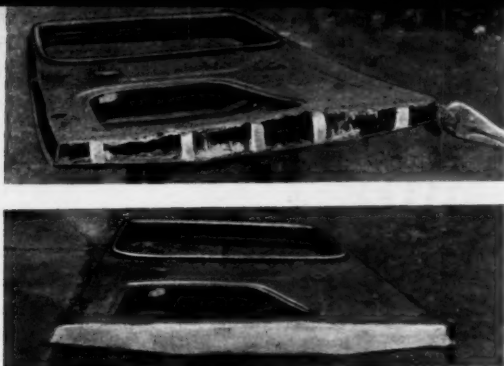


A simple toolkit by Thomas Smith and Sons of Salford, and (below) one of the largest ones, in engineer's bag



Below: A fine set of car tools in a steel case (Abingdon King Dick)





Serious damage: the rotten door bottom of a car, and amateur repair with an Autoplax glass fibre and resin kit; right: two Bondaglass kits



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reflector units of the existing head lamps.

With older cars, an advantage of head lamp conversion is that one gets double instead of single-dipping and the wattage may be greater. But it is a good idea to check both the head lamp and the dip switch for condition, and perhaps adequacy for the heavier duty.

The notes which follow indicate that the range of lens-reflector conversion units covers all pre- and post-war cars. But if anybody has very odd-sized lamps, restoration must take the form of having the head lamp reflectors replated; silver is to be preferred, not chromium. One or two good plating firms are noted later.

Lucas replace an F700 (block pattern) unit, or similar sized units in older cars, for 15s 6d each. A P700 unit (the somewhat longer range used on quality cars) is interchangeable as regards fitting, and costs £1 14s 6d. In its turn, the P700 can be converted to the higher wattage, 60-36W P700 Mark VI, for £1 17s 6d.

Many post-war cars had the small Lucas head lamp; conversion to current lighting has to include rims, and costs £5 2s 6d a pair. The 7½in head lamps of so many pre-war cars cost between £4 7s 6d to £5 7s 6d to convert. This is quite an expense, but it remains less than the cost of a pair of auxiliary lamps in chromium plate.

Marchal import and sell lens-reflector-bulb-holder units that fit the mountings of our own cars. These are the "asymmetrical" lamps of the current International Code, and one should be careful not to be landed with the less-good older

kind, a few of which remain in stock in some shops. The modern kind still have the sharp dipped cut-off, but a pass lamp component is built into the lens. Conversion prices for 7in units are £2 12s 9d Standard Optique, and £3 6s 6d De Luxe Optique.

Special models cater for all the odd sizes of pre-war and immediate post-war cars. An interesting Optique conversion is for the little head lamps of the Ford Popular. Its reference number is C.0152, and it costs £5 3s 6d for a pair.

Notek Electric Co. have a replacement head lamp lens-reflector unit called the Hilite, costing £1 18s each. An unusual feature is a silver-plated reflector. This lamp has a wide spread.

JOSEPH LUCAS, LTD., Great King Street, Birmingham, 19.

MARCHAL DISTRIBUTORS, LTD., Brook Lane North, Great West Road, Brentford, Middlesex.

NOTEK ELECTRIC CO., LTD., 23, London Road, Bromley, Kent.

TOOLS

MANY second-hand cars do not have their toolkits, and it can be cheaper to buy a made-up kit than it is to acquire the individual items separately. A specialized kit, for a particular make and model, avoids trouble with such snags as a mixture of the modern BSW nuts and bolts with older kinds; for cars are in a change-over period in this respect.

Abingdon King Dick, Ltd., cover the toolkit field very thoroughly, with numerous sets. A simple one, for cars with Whitworth and BS threads, is the TKM 512B. A canvas roll has adjustable spanner, ball pein hammer, screwdriver, pliers and cold chisel; three double-ended box spanners, plug spanner, and three double-ended open jaw ones. The tools seem of much better quality than many of those supplied as initial equipment with cars. This set costs only £3 16s 10d. There is an American AF and Unified version.

From thence, toolkits move upwards to reach the realm of fine collections for particular models, housed in steel boxes

Jenks's Britool kits, one containing a fine hammer with special car heads

An inexpensive Abingdon King Dick toolkit with a careful selection of good tools



enamelled in crinkle blue. The best of these costs £6 19s 8d.

Thomas Smith and Sons of Saltley, Ltd., have three standard toolkits. TKW.1 (£1 10s) has three carbon steel double-ended spanners; box spanner; pliers; adjustable spanner; and a Philips screwdriver with plastic handle. TKW.2 has the same items, with the addition of an extra spanner, and an engineer's plain screwdriver. It costs £2 5s. The TKW.3 set (£4 2s 6d) is a strapped tool bag containing a set of six double-ended chrome vanadium spanners; three screwdrivers—Philips, normal and electricians—and all the other usual toolkit items.

ABINGDON KING DICK, LTD., Abingdon Works, Kings Road, Tyseley, Birmingham, 11.

JENKS BROS., LTD., Britool Works, Bushbury, Wolverhampton.

THOMAS SMITH AND SONS OF SALTLEY, LTD., Saltley Mill, Birmingham, 8.

BODY REPAIRS

THERE can be few used cars which may not be improved by the eradication of a rust spot or two, the filling and repainting of small dents and scratches, and similar jobs which many prefer to do for themselves. Of course, there may be need for more extensive repairs to bodywork, particularly if serious rusting has taken place, and at one time this called for professional work of cutting away rusted steel and welding in new, followed by stopping, filling and spraying—a real garage job.

Nowadays, however, the technique of applying patches of resin-bonded glass fibre has been so simplified that anyone, with reasonable care, can make a success of it.

Such patchwork, tried experimentally by a member of *The Autocar* staff more than 18 months ago, has withstood close on 20,000 miles of hard going and appears to be as firm and solid as when new. Test removal of a wing patch, first chiselling free an edge and then tearing it away with a powerful wrench, did more damage than had been repaired originally.

It is safe to say, then, that such a repair is sound and durable; it requires no expensive equipment and is surprisingly easy to do successfully.

The technique—described in great detail in the repair packs which several firms offer—consists of wire-brushing away loose rust, applying a coat of the resin, which adheres powerfully to metal so long as it is not dirty or oily, reinforcing the resin with fibre glass mat or cloth, and building successive layers to the thickness required. The resin sets hard under the influence of heat which it generates itself, and one can then go on to restoring the surface finish. Cellulose stopping compound is the usual material for this purpose, but there are resin-bonded fillers on the market which make the job simple.

Glass fibre repairs are generally applied



Two useful Holt preparations—paint remover and rubbing-down compound

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to stress-bearing locations, but they are not usually employed for the odd dent or similar superficial damage, though they can, of course, be used in such places and they adhere very powerfully.

Formerly any rather deep dent required the panel to be hammered out, filled with solder, stopped, filled, and so on—a lengthy and expensive process which called for professional skill.

Nowadays the work is so simple that anyone can do it satisfactorily, thanks to the development of "plastic" fillers which adhere firmly to metal, set quickly, can be puttied on in depth without shrinking or cracking, and can be dressed to a satin-smooth finish for painting with file or sanding disc and "wet-dry" abrasive paper.

Holts have it in two forms—one is well-known and popular as Loy plastic metal; another is their Cataloy, which is supplied in resin-and-powder form. When the materials are mixed they form a paste which is easily applied and quick-hardening.

Another material for such purposes which has given excellent results on test is the Autoplax body filler of Automobile Plastics, Ltd., who also produce a series of glass fibre and resin kits for repair work. Other well-known names in this context are Simplex and Hermetal (Kenilworth), Bondaglass, and Westpole.

At one time there were doubts whether normal painting methods would be satisfactory when applied to resin-bonded repair surfaces, but cellulose, brushed and sprayed, synthetic enamels and similar finishes have all proved sound and ad-

herent on test surfaces over long periods. If one is in doubt about the application of a particular make of finish, the makers are all able to advise on the best technique.

AUTOMOBILE PLASTICS CO., LTD., 62, High Street, Barnet, Hertfordshire (Autoplax glass fibre repair kits 19s 4d to £9 10s, body filler kits 18s 6d to £2 19s 6d).

DOUGLAS HOLT (EST. 1919), LTD., Vulcan Way, New Addington, Surrey (Loy plastic metal kit 8s 6d, glass fibre repair kit 18s 8d, Cataloy repair kit £2 to £3 10s).

KENILWORTH MANUFACTURING CO., LTD., West Drayton, Middlesex (Simplex filler 10s 6d; Hermetal Double Bond epoxy filler putty 13s 6d lb, cream £1 0s 6d lb).

WESTPOLE MOTORS, LTD., Westpole Avenue, Cockfosters, Barnet, Hertfordshire (glass fibre repair kits 17s to £9 10s).

RETOUCHING PAINTWORK

MAKING good very minor damage, or local repainting after the repair and filling of more extensive dents, is dependent, of course, on the professional painter's rule that the finish paint in colour is only as good as the surface underneath it; it will be uneven if the surface is uneven, and unstable if there is any rust underneath.

Around visible damage there may be an area of paint which has lost adhesion, and rust may have spread underneath, too. In this case, one must remove all unsound paint and rust, and come to bare metal. But if it is only the brittle top coats which have flaked off, leaving the primer sound and covering the metal, as is often the case, then finish may be used.

Filler and undercoat may be used to bring a surface flush; they may be rubbed down with wet-or-dry glasspaper and water; and then the finish paint can be sprayed or brushed. It should be thinned out, or "feathered" away, to nothing, towards the edges of the area.

Powerful but harmless derusting fluids, obtainable in modest quantities at ironmongers, garages and motor shops, are Jenolite, Plus Gas, and the Rust Remover of Douglas Holt. Such fluids, and not metal polish, are also correct for discoloured chromium. Holt also have an excellent rubbing-down compound for paint (3s a pound); and a paint-removing solution (4oz 1s 9d, 10oz 3s 6d, 20oz 6s 9d, and 40oz 12s).

Car colours change as they age, either fading or growing darker, so that a difficulty of matching arises. Should you make retouching paint lighter to correspond with fading of the body as a whole, or darken it for a darkening body?

If you are touching-up before selling the car, the retouching should perhaps match! If you are keeping the car, the retouching should be the proper colour, and it will fade to the same extent as the original finish did.

Celspray, Ltd., overcome the amateur's difficulty about buying small quantities of de-ruster, primer, filler, and cellulose, also thinners and wet glasspaper, by selling them in kits (2oz bottles). A screw-cap sprayer fits any of the bottles, and is fed by the owner's own car foot-pump or hand-pump. There is a soft rubber bulb in the line, which smooths the pulsations into a steady flow of air. This works excellently; and the little spray is just right for the use of amateurs.

Standard colours are available, and special ones are supplied to order, the car make and the manufacturer's name for his colour being required. There are several outfits and some extras, but the basic kit costs £1 2s, carriage 1s 6d.

Parsons sell either black or clear lacquer in pressurized Aerosol tins. These produce a fine spray, suitable for amateur use, and avoid waste. They cost 12s 6d each. Once used, the spray may be found to be clogged the next time, but it can be pricked and cleared.

J. H. Sankey and Son. As motorists seem to have heard of the protecting qualities of what are called special zinc-rich paints, they often ask about this. A first-class kind is called Autograde Glopac zinc-rich cold galvanizing compound. Containing 95 per cent zinc, it is a self-setting resin, and gives remarkable protection. It costs 10s per carton. There are also synthetic paint versions.

Tonespeed have 24 basic kits, each containing three shades, and an empty mixing bottle. By obtaining the appropriate kit for the car, it is possible to match the finish, it is claimed. A kit costs 6s.

Nuagane touching-up lacquers, 9s 6d a pint, and smaller or larger quantities, set out to match all the car shades. Under "Austin" alone, 44 colours are listed, starting with Afghan Brown.

CELSPRAY, LTD., Beechwood Rise, Watford, Hertfordshire.

JENOLITE: JENOLIZING CO., LTD., 13-15, Rathbone Street, London, W.1.

NUAGANE PRODUCTS, LTD., 19, Soho Square, London, W.1.

THOS. PARSONS AND SONS, LTD., 70, Grosvenor Street, New Bond Street, London, W.1.

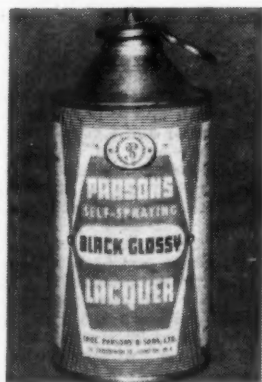
PLUS GAS CO., 1, Hay Hill, London, W.1.

J. H. SANKEY AND SONS, LTD., Hadley Castle Works, Wellington, Shropshire.

Tonespeed: EXPRESS, LTD., 670-672, Holloway Road, London, N.19.

(To be concluded next week)

Right: All the basic needs of the professional job in small quantities (Celspray). The bulb, of thin and soft rubber, converts the impulses of a pump into an even air flow. Left: Parsons touching-up lacquer in a pressure-spray canister





Prince Philip at Rovers

AS we surmised in last week's description of the Rover T3 turbine car, this vehicle was driven by Prince Philip during his visit last Friday to the Rover works at Solihull. Initially he was driven in the car on the company's 2.3-mile test circuit by the chief project engineer (turbines), Mr. Spencer King; later, on the track, the Prince changed places and became one of the few privileged persons outside employees of the company who have driven the car.

models are to be made, and there will be a four-wheel version of the car in addition to the familiar three-wheeler. Because of lower import duties, the car is to be powered by a British engine.

In the last 18 months sales of the Heinkel totalled 12,000, but annual output is expected to reach 10,000 within two years. The Heinkel Motor and Aircraft company in Stuttgart is giving up manufacture of the car because of the development of its aircraft division, and the Heinkel will be produced in future solely at the plant in Ireland.

traffic at this junction. The cost, which includes the approaches, slip roads, and also the extension of the dual carriageways westwards to Woodstock Lane, is about £500,000. The Kingston By-pass Association have estimated the cost of their suggested roundabout at £80,000, but I am advised that the probable cost would be more than double this, without including any provision for extending the dual carriageways. In any event, in our judgment, it would be quite inadequate for the traffic."



CHRYSLER PLAINSMAN: this estate car version of the Chrysler Royal has been introduced in Australia. The Plainsman is 90 per cent Australian made, and automatic transmission and power-operated brakes are available as optional equipment

Mercedes Output Increased

TOTAL Daimler-Benz production last year, according to the company's annual report, was 15 per cent higher than in 1956, and Mercedes cars manufactured during the year numbered 81,000—an increase of 16 per cent on the previous year's figure. Daimler-Benz home sales on the German market are said to represent 47 per cent of the total.

Dover Harbour Busy

CAR traffic through Dover Harbour has more than doubled in the last five years. During 1957 the number of vehicles being shipped to or returning from the Continent reached a total of 264,000, an increase of 47,000 over the previous year. In December alone the number of cars handled by the Harbour totalled 5,055—an average of 160 per day, and an increase of 1,882 over the figure for December 1956.

Heinkels from Ireland

IRELAND'S first industry for the complete manufacture of cars will start production in September at the Dundalk Engineering Works, which is to build Heinkel cars. Right- and left-hand-drive

Morris Major for Australia

OUR correspondent in Australia reports that a version of the Wolseley 1500 which has a Morris Minor radiator grille and fascia layout has been put on the market there by the B.M.C. factory at Victoria Park, Sydney. It is called the Morris Major, and is powered by the same 1½-litre engine as the Wolseley. The car is intended to compete locally with the Volkswagen, and the price will be similar. Within a month or two details of an Austin version of this car are also to be announced.

Kingston By-pass Row Over

WHEN the Minister of Transport's decision to proceed with the plans for construction of an underpass on the Kingston By-pass was announced, there was an immediate revival of the protests which had been lodged against it. Now, however, it would seem that the argument is ended, following replies made by Mr. Nugent to questions raised in the House.

Asked to what extent the public interest would be served through the construction of the underpass, Mr. Nugent replied: "We have reviewed this scheme very fully and are satisfied that only an underpass will adequately serve the needs of

Plants to Close

CHRYSLER and American Ford have closed two plants during the week to bring production into line with demand, and 6,000 workers have been made temporarily idle. Ford's closed factory is at Dearborn; that of Chrysler is at Kokomo, Indiana, which supplies transmissions for the entire range of Chrysler cars. Both these factories are expected to be reopened early next week.

France to Discontinue Carnet

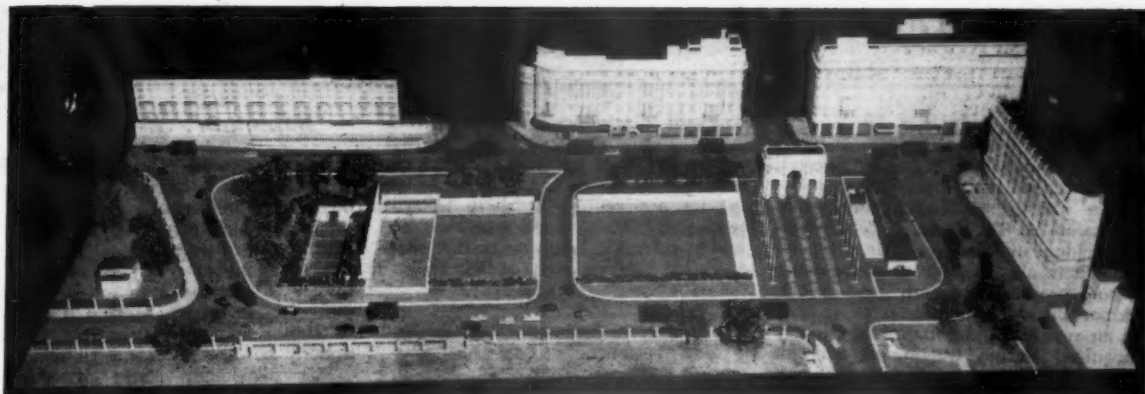
TOURISTS visiting France this year will not need to carry carnets or triptyques. The decision is one of several enticements which are to come into force before the holiday season to encourage visitors to tour in France. Switzerland, Sweden, Germany and Austria have already dispensed with carnets, a concession which means that tourists need only passports, British driving licences (international driving licence in Germany) and British registration books. No date has been announced when this relaxation will apply to France.

Italian Exports Reach One-third

LAST year the Italian motor industry produced 318,488 cars, and the total production (including commercial vehicles) was 11.4 per cent higher than in 1956. An even greater increase was made in the number exported which was 36.9 per cent higher, with a total of 110,953 cars. The percentage of production which was exported was thus 33.9 per cent.

BEN News

AT the annual general meeting of the London and Home Counties Centre of the Motor and Cycle Trades Benevolent Fund—held on 5 February—Mr. R. G. Emmett was again unanimously elected as chairman for the ensuing year. Mrs. Doris Clark was re-elected as vice-chairman, and Miss G. M. Horner and Mr. G. Selwyn Smith were re-elected as hon. secretary and hon. treasurer respectively. It was recorded that the Fund's highlights in the past year had been the Derby Draw and the Motor Show Dance which resulted in cheques for £300 and £319 for the Nuffield Nursing Home; both these events are to be held again.



DESIGNS FOR improvement of Marble Arch and Hyde Park Corner, London, were submitted by the Town Planning Committee to the London County Council on Tuesday. Considerable sums have been put aside for architectural and landscape treatment, and the improvement in appearance may be expected to match the increase in traffic flow. This model of the new layout for Marble Arch shows how the Arch itself, around which is the present way into the Park from the north-east corner, will become redundant, to be reserved for ceremonial occasions

Free Pardon for Convicted Driver

A DRIVER who was convicted in December 1956 for exceeding the 30 m.p.h. speed limit for dual-purpose vehicles has been granted a free pardon by the Home Secretary, following representations made on his behalf by the Automobile Association. When the case came before the court the driver was not legally represented, and pleaded guilty. Subsequently he discovered that, because his vehicle was equipped with four-wheel drive, it was not restricted to 30 m.p.h. Although the right of appeal had been forfeited on a time basis, the case was submitted to the Home Office; the £4 penalty has been refunded, and the licence endorsement has been expunged.

A.C. Current on the Way?

SOME of the large commercial vehicles built by American Ford now have alternating current three-phase dynamos as standard equipment. This use of A.C. dynamos is a major change, which may well spread to passenger cars in the not-too-distant future.

Minor Road Improvements

DETAILS of two road improvement schemes have been released by the Ministry. First of these is on the Great North Road (A1), where dual carriageways are to be provided on the winding section between Buckden Railway Bridge and Ellington Brook, Brampton, in Huntingdonshire, a distance of 2½ miles. The second, on which work has started, is on the London-Tilbury road (A13), where dual carriageways are to be constructed for a length of 1.7 miles on the East Ham - Barking By-pass.

Vauxhall Exports Over 10,000

IN January, Vauxhall exports exceeded 10,000 vehicles in the month for the first time in the history of the company. Total of cars exported was 7,958, and including commercial vehicles the grand total was 10,666. This represents an increase of 14 per cent over the previous highest total for a single month, which was in November, 1955, at 9,390.

Private Ownership of VW

IT has now been announced that later this year the Volkswagen concern is to be denationalized. Sales of shares will probably involve some £34,000,000. Plans to transfer Volkswagen to private ownership were raised several times last year.

Attention to Switch

SIR CHARLES TAYLOR, speaking on the subject of road accidents, moved in the House of Commons last week that the 40 m.p.h. speed limit should be extended and that the 30 m.p.h. limit should be done away with in some areas. The police, he proposed, should devote more attention to catching dangerous drivers than to trapping motorists who exceeded the speed limit by five m.p.h. Mr. Nugent said that the Government accepted the motion, and that neither the Government, M.P.s nor authorities had the cure (for road accidents) in their hands.

Exports to Sweden Increased

BRITISH car exports to Sweden rose from 17,284 in 1956 to 19,504 last year, and were second highest again, followed by France, Italy and the U.S. Leading exporter to Sweden was Germany, whose total of cars sold rose from 56,375 in 1956 to 66,884.

Scholarships in Road Transport

AN OFFER by the Institute of Transport for the permanent endowment of at least two research fellowships in the economics and organization of transport has been accepted by Oxford University. The Institute is making a total of £150,000 available in ten yearly contributions, and the transport studies will be included in the general pattern of research at the university. This is a new and unusual sign of the importance of modern transport.

WESTMINSTER COMMENTARY

Parking Discs. Mr. Watkinson has resolutely set his face against the French system of parking discs, which has proved so successful in Paris, and he does not propose to defer the experiment with parking meters which is to be carried out in Westminster. Once again he has taken the advice of Mr. Samuels, chairman of the London and Home Counties Traffic Advisory Committee. With a small group of experts Mr. Samuels studied the French system of parking discs, and came to the conclusion that as a method of parking control for British traffic conditions, particularly in London, it would be less efficient than parking meters.

The disc system, said Mr. Watkinson, did not control where parking might or might not take place, nor, since it made no direct charge, did it do anything to regulate demand. The system was more readily evaded, he said, and it was estimated that it would take three times more people than the meter system to enforce adequately.

Nevertheless, little has been said to refute Earl Howe's case that "the so-called experiment of decorating certain areas of the West End with parking meters is likely to cost £90,000, while

the French equivalent costs virtually nothing." Decoration is perhaps the wrong description for the pavement eyecore which meters undoubtedly are.

Peers on Roads. It was no fault of Lord Derwent, chairman of the British Road Federation, that he obtained little satisfaction from the Government when he put his finger on the "nigger in the woodpile" affecting the road programme. He did not take the easy way out by asking for greater expenditure, nor did he complain of the rate of construction. All he asked was that the preliminaries, particularly over the acquisition of land, should be so phased that money was spent as soon as it was authorized.

If one per cent of the present £240,000,000 road programme was set aside for acquisition now, he claimed, in 1961, if funds were available, 700 miles of new roads could be started. To this, Lord Mancroft replied that the Ministry were looking far ahead with the preparation of a 20- to 30-year master plan for roads. In future it was hoped to give local authorities a programme agreed in principle for three or four years ahead, although Lord Mancroft could not say categorically whether land acquisition would be a part of the preliminary work.

Disconnected Jottings

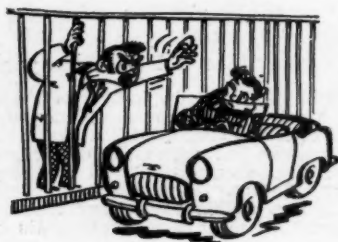
BY THE SCRIBE

Barry Appleby Drawings

Down to Earth

IS an issue which is largely devoted to second-hand cars rather a let-down for the staff—an undesirable intrusion of the sordid into a world of golden motoring? Unfortunately, no—there always seem to be so many young people about with good go-ers. A current worry of the technical staff is an amiable young man with a newly acquired station wagon, so decrepit that the passengers' seat is a small packing case and domestic cushion. Even on our own staff, there are those who are not old, fat and rich enough to avoid buying second-hand. And then there are readers with queries about the car that went "tick-tick" for some time, then went "ugh"—and stopped. The same things always happen to my neighbours' cars.

It is, in fact, terribly difficult for us to live in the world of new cars for more than a fleeting hour of escape from reality.



Cost £1 a foot

Costly Guard-rails

PEDESTRIAN guard rails, which are so excellent in preventing city accidents, are not so cheap as I thought. More than one municipal engineer has told me they cost £1 a foot, a startling figure. The modest defences of my garden are dogproof, and no jay walker could stroll through them, or hop over, yet they cost little.

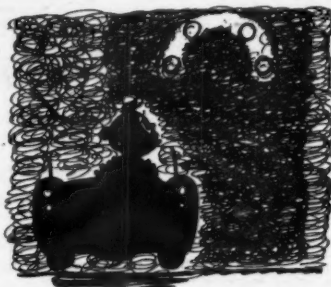
The usual kind of guard rails have strong tubular steel posts and rails, and tough wire mesh. It is a pity that something adequate, but cheaper, could not be evolved.

Riding on Rocks

CRITICISMS by "X" of the harsh ride, rattle tendency and hoppiness of his car have now ceased; he has discovered that his tyre gauge misread to the extent that he has always had 7lb sq in too much pressure in the tyres. This is confirmed by a test gauge I lent him, of known accuracy, and those available at several garages.

The odd coincidence is that the serious errors of his own gauge and of that on the airline of his local garage, were exactly the same.

Cars are acutely sensitive to tyre pressures. Many keen motorists do, within tolerable limits, vary the pressures for different kinds of motoring.



Seen before the red lamps

Hoop La!

THE other night, in fog, I saw before me a hoop of four white lights, high up and receding. Having seen this before, I guessed that it would be a U.S. Air Force bus. Like all military passenger transport, it had the grim look of something taking political detainees to Siberia, so the lights were not a gay, carnival touch of decoration.

As such white lamps are seen before the red rear lighting and may be deceptive, I cannot think what their purpose may be.



Detergent for desmogging

Chemical Reserves

THAT particular foggy journey was complicated by the fact that the windscreen was suffering from some sort of filming: I had been in an industrial city all day. The windscreen washer and wiper blades did no good.

It would be rather a score if one had two tiny, cheap screen squirts to reinforce the main one, and offering a choice of detergent for desmogging, or methylated spirits for defrosting and de-icing.

Salesman's Resistance

IN this age of salesmanship, it is queer that it can be so difficult to buy a small object such as a car accessory. A typical pilgrimage might start with an owner seeing something attractive on a chum's car, or reading a review of selected accessories in this journal. He may have seen it in one of those oak show cases, of which nobody has the key, at a garage.

His pilgrimage starts at Stores. There, they stoutly deny the existence of such an object, adding that they do not stock it, even if it existed. Over-ruled by persistence and printed evidence, the storeman may send to the garage wholesalers, the "factors."

Factors naturally are most interested in best-selling lines with a big turnover. However, they may try to get the accessory from the maker. Now the maker replies that he supplies only £10 lots of a ten-shilling accessory; he hasn't the staff for correspondence and packing when the sale is of a single object. But neither the factor nor the garage wants to buy 19 to sell one.

Away, or Buried

THEN how about the accessory shops? There the motorist may find piles and piles of inexpensive plastic and other decorative objects, government surplus, and other things which yield a high profit margin. The serious engineering accessory, which is too expensive to make to yield a tremendous discount, will be absent or buried beneath the junk. There ought to be a better retail set-up.

Tolerating Tigers

ALTHOUGH I have always been irritated by the obscuring of rear windows by the dancing goliwog or plastic budgerigar, I have been tolerant of those reclining tigers with which some people decorate their parcels shelf, for they do not seem to obscure the view, or wobble about. But a reader is indignant about a group of a tigress and two cubs, in the rear window of a car seen in the West. Every time the brake lamps went on, the mother tiger's eyes lit up.

Law-abiding Boffin

IN a moment when, presumably, Homer nodded, Sir Robert Watson-Watt, father of radar, had a brush with the Law. He was caught in a radar speed trap, according to *The Sunday Times*. It says much for the probity and citizenship of Sir Robert that his car was not immunized by a field of invisible rays, or something.

**LAST YEAR'S CHOICE
FROM THE DEALERS**

CHOICE of a used car is complicated by the fact that, on the trial run, condition has to be considered, in addition to the problem of whether the particular car fulfils your requirements. But in choosing used cars for road test purposes no thought is given to condition until the test starts; and the result is that a variety of cars is tried, from really good ones to surprisingly bad ones, as this review of last year's tests will show.

During the year, 17 cars were tried, bringing the post-war total of used car tests to 119. With each one the idea has been to provide a detailed picture of a particular car which is offered for sale by a dealer at a given price. The dealer's address is given so that readers can—and often do—try to buy the actual car tested, but the tests are intended primarily to serve as pointers to what is available, while giving at the same time an indication of the performance and condition of the model after a stated time and mileage. A wide range was covered—from ages of just over two years to nearly ten, from prices of £295 to £1,895, from petrol consumptions of 11 to 42 m.p.g., and from mileages of 11,579 to 70,026.

And from hundreds at 11,579 to 70,026.

To some extent the dealer who provides the car for test is also under examination, for although many of them cannot spare the time or money to take an extended trial run in each car they sell, credit automatically attaches to those who provide really good value. The system of selecting dealers has a bearing on this. Normally, a particular make and model of car to be tried and described is selected, in the light of what has gone before; then from an advanced proof of *The Autocar* classified advertisements a dealer who has advertised such a car is picked at random, and asked if he would like to provide it for test. The answer is invariably "yes," and it is collected the next day so that there is no time for any special preparation of it. A variation of this occurs when a dealer asks us to test a car from his stock, and then the process is reversed: a car is selected at random from the list of those which he is offering for sale. Again no time is allowed for special preparation of the car chosen: the whole idea of the tests is that they should be carried out on vehicles in the same condition in which they are offered for sale to readers.

From the log book is obtained the month and year of original registration, and the engine number to check that the unit has not been exchanged. For the record, though of lesser importance, a note is made of the number of owners the car has had. Then the test begins, and it consists of normal use in traffic and on the open road, on long and short journeys, over a few days to a total of 300-400 miles. Oil level is carefully checked at the start, so that an accurate reading of consumption can be obtained; and petrol consumption is measured from empty tank to empty tank under conditions of hard and gentle driving. A correction is obtained for the car's speedometer by timing over a measured quarter-mile, and acceleration figures from standing starts through the gears, and in top gear, are timed. Finally, the car is raised on a garage lift for inspection of the underbody, and the test is just about completed.

A list of the cars tested during 1957 is on page 275, with prices and depreciation, and on page 276 is a table showing the faults which occurred frequently, and the cars in which they were present. From this it will be seen that surprisingly few cars did not exhibit at least two of these faults, but there were three which had no serious ailments at all.

First of these was a 1952 Standard Vanguard I, which confirmed the model's good reputation for durability. The most serious criticism which could be aimed at it was that the clutch pedal travel was in need of adjustment, but this is a trivial matter which could be rectified in a few moments.* Oil consumption was low, and there were no undesirable noises or rattles, the whole car giving the impression of being one which had not covered an excessive mileage, and had been properly maintained. A particularly impressive feature was the excellent way in which the Vanguard had been prepared for sale.

On trying such a car as this one almost feels that the previous owner or owners have not had their money's worth in terms of deterioration for the price depreciation which they have borne. In the case of this Standard the original total purchase



VARIETY: Top to bottom, 1955 Ford Prefect II; 1954 Aston Martin DB2/4; 1951 Bentley Mk VI; 1952 Standard Vanguard I

SEVENTEEN USED CARS . . .

cost of £919 had fallen to a used price of £450; certainly it gave no impression of being half worn out.

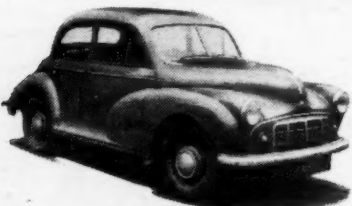
The second trouble-free car was a Volkswagen. Attempts had been made to obtain a comparatively old example, but the choice is somewhat limited with foreign cars, and we had to be content with a three-year-old example which had covered 26,000 miles. In all mechanical and bodily respects the Volkswagen was almost up to new car standards. It had a folding sunshine roof, yet the draught sealing was still perfect, and there were no indications that there had ever been leakage through the roof. Reacquaintance with the Volkswagen recalled its good points, of which one is its remarkably subtle suspension, and another is that it can be driven on sustained full throttle whenever conditions allow without any feeling of stress; but the car's bad points were also evident. The worst of these is the excessive noise from the engine, from its cooling fan, and the transmission. However, it was not felt that this was the result of wear, and the



1951 M.G. 1½-litre



1948 Vauxhall 12



1953 Morris Minor

1953 Armstrong Siddeley
Sapphire 346

1947 Triumph Roadster



1953 Morris Oxford



1955 Riley Pathfinder

engine in particular was undoubtedly in very sound condition.

Third, and representing among the best value of all the cars tried during the year, was a 1953 Armstrong Siddeley Sapphire 346. The most striking feature of this car was the way in which its value had fallen in four years from £1,573 to less than half of that.

It was a car that proved to be extremely pleasant to drive. The windscreen is deep and the driver has a commanding view of the road. Performance was very good, though at some cost in petrol, for hard driving reduced the m.p.g. to 15. Extremely comfortable on long journeys, and capable of cruising at well over 70 m.p.h. and covering the ground proportionately rapidly, the Sapphire also showed very few signs of mechanical or bodily deterioration. The black cellulose and chromium were in outstandingly good condition, and the car was considered to be a really first-class example of the Sapphire; thus at the price asked it represented outstanding value.

The same spotless condition of the interior and exterior which is the evidence of a very careful owner, was found in a 1953 Morris Oxford I. Like the Standard and the Volkswagen, this is another car which is noted for durability, but the car tried was nevertheless in exceptionally good condition. Mileage covered was just under 30,000, yet oil consumption was negligible, and the car was mechanically quiet throughout. Sole criticism of the Oxford was an annoying clutch judder in starting from rest which called for special care if it was to be avoided.

The long life of the engine is undoubtedly related to the comparatively low power output of the unit. Under no circumstances would it work really hard, and the leisurely performance was such that nearly half a minute was needed to reach 50 m.p.h. from a standing start, and maximum speed was 62 m.p.h. The car's attributes—good roadholding, steering and brakes—made this criticism of the low power output from the engine less serious than it might have been, because as a result, quite rapid progress was still possible. As often happens when engines and all mechanical parts are more completely run-in, the performance of this used car was a shade better than that of the model when new.

Also, marred by clutch judder was a 1955 Ford Prefect, which was just over the two years' minimum age limit for these tests. Here the clutch judder was a tendency only, and it could be avoided without difficulty. The car was otherwise thoroughly sound, and was again extremely well prepared for sale. Where this car differed from the Standard and the Morris was in the value which it offered as a used car purchase. Admittedly prices of new cars have risen in the meantime, but the price asked for it was nevertheless only £50 less than it had been when new. This clearly emphasizes the premium which still attaches to small, economical used cars.

In contrast of size and condition to the Ford Prefect was another big car—the last used car test of the year—a 1949 Austin Sheerline. This vehicle had cost a total of £1,790 when new, and although it had deteriorated in many ways it still retained a number of the features which had made it a quality car when new; but appreciable engine wear was evident, and oil consumption was not much above 100 m.p. pint. There were many indications that this car had suffered recent neglect. Ignition and carburation were in need of attention, and a number of minor faults such as head lamps not dipping correctly and out of adjustment, jacking system and radio not working, paintwork scratched, dented and generally drab, interior woodwork cracked and chipped, all added up to the conclusion that the car was ill-prepared for sale, and that some extra preliminary expenditure would be required of the new owner. Yet this had to be allied to the price asked for the car, which was only £370. For a motorist whose annual mileage is really low, to whom the petrol consumption of 11-15 m.p.g. would thus be tolerable, such a car might prove to be quite a sound and practical vehicle.

Depreciation on the Austin Sheerline had worked out at about £170 a year (see table opposite); another car tested which

had lost its value at the same rate was a two-year-old Riley Pathfinder which presented a very different picture, for it was in exceedingly clean condition. Although the car is big for an engine of only 2½ litres, it proved capable of cruising at a true 80 m.p.h., and the performance was in keeping with the character of the car. The worst feature was troublesome clutch judder in starting from rest—one of the failings of the model—which persisted although the maker's anti-judder modification had been fitted. Another modification had been carried out on the self-adjusting vacuum servo brakes, which were quite excellent. The braking power available in return for modest pedal pressures was remarkably high.

The modifications which had been carried out on the Riley raise a point which is sometimes forgotten in comparing used car values: that extra equipment and improvements to a standard model tend to make an above-average price far more acceptable.

Taking this to extremes was an Aston Martin DB2/4, tested towards the end of petrol rationing. This car had chromium-plated wire wheels—an embellishment which cost £15 8s per wheel—and other extra equipment included Al-Fin brake drums, a radio, two fog lamps, two wing mirrors, a radiator blind, and a windscreen washer.

Unless the Triumph Roadster is included as such, the Aston was the only sports car tested during the year. It had depreciated little, the only major fault being in the steering, which had been adjusted incorrectly. The bodywork and interior were scarcely marked, and the mechanical condition confirmed the low mileometer reading (11,579). Road holding and handling qualities were among the best that can be obtained, and the engine seemed to be in its prime—well run-in, but not appreciably worn. Standing start acceleration tests were taken through the gears from standstill up to 90 m.p.h., which was reached in only 25.8sec. Although 5,500 r.p.m. were not exceeded, it was possible to reach a true 60 m.p.h. in second gear, and 90 m.p.h. in third.

This was the fastest used car tested during the year; the slowest was the subject of the test which preceded it, a side-valve 1953 Morris Minor. Chromium was a bad feature of the Minor, and some of the rusted areas were found to be too far gone for renovation by polishing. This was a pity because the paintwork and interior were generally in good condition.

When the engine was cold piston slap was noticed, and oil consumption was worse than 200 m.p. pint, so that the cost of a reconditioned engine fairly soon after purchase would need to be considered by the buyer.

Among the older cars tested was a 1948 Vauxhall 12. One of the most desirable low-priced 1½-litre cars in its day, it still exhibited many of the features which made it popular at its introduction before the war, and again in the early post-war years. A roomy four-seater, it gave a comfortable ride, was very easy to drive and proved nimble in traffic. Performance and petrol consumption, however, were below standard for the model, and it was considered that attention to the ignition and carburation was required.

There were few body rattles in the Vauxhall, and it was not until the car was put on the ramp that the sorry tale of 9½ years' corrosion was revealed. The side channels beneath the doors had rusted extensively along both sides, and large pieces of paper-thin metal were adrift. At the back, one section had been cut away, and a new piece welded in to carry the load of the rear spring mounting.

On a car of such age as this it is asking for trouble to buy

Date Tested 1957	Car	Age		Total price new £	Price second-hand £	Total Depreciation £	Approximate annual depreciation £	Annual depreciation as % of total price new
		Yrs.	Mths.					
18 Jan.	1948 Alvis 14	9	0	1,276	450	826	92	7.2
25 Jan.	1954 Austin Hereford	3	1	857	425	432	140	16.3
15 Feb.	1953 Morris Minor	4	0	582	385	197	49	8.5
8 Mar.	1954 Aston Martin DB2/4	2	4	2,728	1,895	833	357	13.1
29 Mar.	1947 Triumph Roadster	9	4	991	395	596	64	8.1
19 Apr.	1953 Armstrong Siddeley Sapphire 346	3	10	1,574	685	889	228	14.5
17 May	1954 Volkswagen	2	10	735	575	160	56	7.6
31 May	1953 Morris Oxford I	3	7	709	495	214	59	8.3
28 June	1953 Hillman Californian	3	9	724	535	189	50	6.9
26 July	1951 M.G. 1½-litre	5	9	880	485	395	69	7.8
16 Aug.	1955 Riley Pathfinder	2	1	1,241	875	366	176	14.2
6 Sept.	1952 Standard Vanguard I	5	3	919	450	469	89	9.7
4 Oct.	1950 Wolseley 6/80	7	6	767	365	402	53	6.9
1 Nov.	1951 Bentley Mk VI	6	11	3,674	1,450	2,224	322	8.8
15 Nov.	1948 Vauxhall 12	9	5	442	295	147	16	3.6
29 Nov.	1955 Ford Prefect II	2	8	561	510	51	19	3.4
13 Dec.	1949 Austin Sheerline	8	7	1,790	369	1,421	165	9.2

Depreciation naturally varies according to the amount of the original purchase cost. Thus although the annual decline in value was highest on the Aston Martin, the depreciation as a percentage of the price new was highest on the Austin Hereford, and was lowest on the Ford Prefect II. In fact, the column on the right gives a clue to the cars which maintain their values

without first inspecting the underneath. On this Vauxhall extensive oil spraying might have postponed the fatal day, but in even later stages of corrosion there would be a serious danger that violent stress—such as a minor accident—would result in the body structure breaking up and the car being written off.

With an Alvis 14 of almost the same age as the Vauxhall there was none of this underbody corrosion trouble, because the car was not chassisless. The four-cylinder engine had just been overhauled by the providers of the car, and the Alvis was generally in much above average condition for its age. It was pleasant to drive, and the mechanical and bodily order confirmed the excellent reputation of Alvis cars for durability. It was offered for sale at £450 which, although high for such an old car, was very fair for one which had just been rejuvenated by the vendors, and for which a long, trouble-free life might have been expected. There is much to be said for the purchase of a good Alvis 14 as a solid, dependable used car.

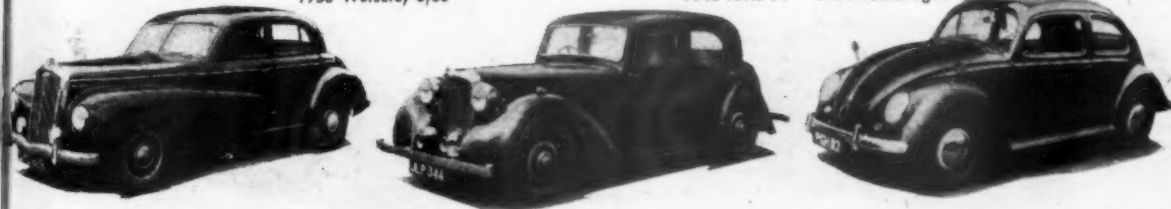
Next car to be tested after this Alvis was far less satisfactory, since it had obviously covered a high mileage. It was a three-year old Austin A.70 Hereford, and the sole name in the log book was that of a company. In some circumstances company cars represent quite favourable value on the used car market because the standard of maintenance which they receive, being less rigorously controlled financially, may be better than what some private owners are prepared to afford. But the disadvantage is that mileages are often much higher than the normal average of 10,000 a year.

On this Austin the pedals were loose on the cross-shaft, there were seven inches of free play at the gear lever with any gear engaged, and excessive noise in the indirect ratios was noticed. The tappets were noisy, and engine oil consumption was about 300 miles per pint. Foot and hand brakes were in need of adjustment, and there were many minor defects calling for attention which would keep the new owner busy for some time. One of these was in the mileometer, which had stopped working, and gave the suggestion that it might have been turned back to a false low reading at some time or other. It is very unusual for these instruments to go wrong unless the whole speedometer is at fault. The Austin Hereford is a good car which lasts well, and the poor condition of this tested example simply emphasizes the effect which an owner can have on a car in as little time as three years.

Another car with a number of mechanical faults was the

1950 Wolseley 6/80

1948 Alvis 14 1954 Volkswagen



SEVENTEEN USED CARS . . .

	Alvis 14	Austin A.70	Morris Minor	Aston Martin DB2/4	Triumph Roadster	Armstrong Siddley Sapphire	Volkswagen	Morris Oxford	Hillman Californian	M.G. 1½-litre	Riley Pathfinder	Standard Vanguard	Wolseley 6/80	Bentley Mk. VI	Vauxhall 12	Ford Prefect	Austin Sheerline	Total
Chromium poor	—	●	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—	4
Paintwork poor	—	●	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—	4
Interior poor	—	●	●	—	—	—	—	—	—	●	—	—	—	—	—	—	—	6
Engine nearly due for overhaul	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Steering faulty	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Dampers weak	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
Gearbox noisy or synchromesh weak	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5
Clutch slips or judders	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Back axle audible	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Brakes need attention	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Handbrake ineffective	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Speedometer erratic	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Excessive rattles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Tool kit deficient	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8
Oil consumption worse than 300 miles per pint	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10
No. of well worn tyres	1	5	2	0	3	1	1	2	4	2	0	1	0	3	5	3	4	2*
No. of owners	2	1	1	2	1	2	1	1	4	3	1	1	2	3	2	1	4	2*

*Averages.

This table of the faults which the tests revealed shows clearly which cars were in good shape, and which were less satisfactory. Those with a column of black dots stand out as poor examples in comparison with those for which only one or two faults are marked. Greater consumption of oil by one car than another is not necessarily a fault; and price is related to condition

Hillman Californian tested half way through the year—on which the low mileometer reading again was suspect. Most serious fault was in the steering, in which excessive wear resulted from use for a long time while out of adjustment; an overhaul costing some £5 to £10 would be needed to put it right. The suspension dampers were no longer working, with the result that the car could be felt to "float" up and down on all but the smoothest surfaces. Oil consumption was down to about 120 m.p. pint, and the brakes pulled to the side. Some expense would be involved in restoring the car's mechanical condition, but the interior and exterior were first class.

Tired suspension dampers on the Hillman Californian recall a car tested later in the year—a police-type Wolseley 6/80. Initially the car was scarcely safe at speed but it was tried again after new suspension dampers had been fitted by the vendors. At once the Wolseley took on a different character, cornering well and being directionally stable, and the front end pitching which had occurred before was eliminated. A further major fault on this car was that piston slap was audible when the engine was cold.

It is always easier to obtain for these tests comparatively

it was a car with many mechanical faults, to which was added maroon paintwork that had faded unevenly, and an interior which had become dirty and worn, and no longer exhibited the neatness which had been among the attractions of the model. More serious was stiffness in the delightfully positive rack-and-pinion steering.

This is a pleasant little car to drive, and one of the features which helped to make it one of the most popular small cars is the wide range of equipment offered. It includes a sliding roof, opening windscreen, rear window blind, trip mileometer, built-in jacking system, adjustable steering column, and a luggage locker lid which opens to the horizontal to serve as a table. It was suspected that its engine may have been overhauled fairly recently, as it was in very sound condition in spite of a mileometer reading of 51,000. Finally we come to the best used car tested during the year—a Mk. VI Bentley. This example was seven years old and had covered 70,000 miles, yet the interior and exterior were like those of a mundane car after a year or two from new. New pistons and bearings had just been fitted to the engine, giving it a fresh lease of life, and the silence of this and all other working parts of the car was well up to the very high standard expected of the marque. A fault which was to be repaired by the vendors before sale was that the mechanical brake servo was due for relining, and the performance of the brakes, though still very good, was appreciably below the exceptional standard of which the model is capable. Also, a vibration period was noticed at high revs in the indirect gears.

Nevertheless sampling one of these Bentleys after seven years, one realizes the potential life in them: it had scarcely started to depreciate.

So the cars came and went. The faults listed do not really point to any special lesson as to which troubles are common and which are not. But what does stand out from the tests is that with care in selection and examination, it is possible to obtain some remarkably good cars from the secondhand market.

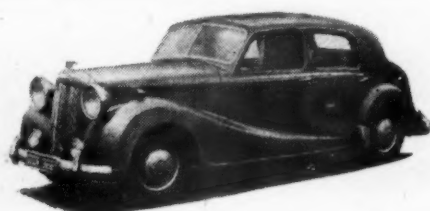
J. S. M. BLADON.



1953 Hillman Californian



1954 Austin Hereford



1949 Austin Sheerline

HOLLAND LEADS OFF

(Continued from page 263)

In tulip land the new Dutch DAF was exhibited for the first time to the public when the Amsterdam Show opened last week. As the first Dutch car for many years, the DAF naturally enough attracted greater interest from the crowds than did rival makes, but it was far from being the only car to be making its first international show appearance. Owing to the requirements of the Belgian International Exhibition in Brussels, the Brussels Show had been cancelled, with the result that Amsterdam became the first round in the 1958 show circus.

British industry also had products being shown internationally for the first time—the 1.5 Sunbeam Rapier, Hillman Husky, and the latest version of the Triumph TR3. The Goggomobil estate car, based on the little van was also in the list of firsts. In all, 63 makes were on show, Britain being predominant with 20, then Germany 15, U.S.A. 12, France eight, Italy four, Sweden two, and Czechoslovakia and the Netherlands one each.

The Dutch market is interesting because it is almost entirely "free"—there are no restrictions on the number of cars which may be imported, and the duty on cars brought in fully constructed is the only deterrent to this type of purchase. The charge is 20 per cent, which most of the major manufacturers avoid by the use of Dutch assembly plants. In all there are more than 20,000 people employed in the Dutch motor industry.

Breakdown of the nationalities of all cars sold in Holland shows Britain in a light bright enough to read by, if not dazzling. Of a total in 1957 of some 63,877 the British contribution was 12,606 compared with 20,133 for West Germany. These figures are better than they seem, however, because the requirements in Holland are exceptional. It is a small and, at present, economically-minded country. With nearly all motoring done on the flat—and usually on the straight as well—a popular requirement is high-top-gear-economy, with flexibility and perhaps roadworthiness in a lower category.

The DAF car was fully described last week, and it will suffice now to mention briefly only that it seats four, has a forward-mounted, air-cooled, four stroke, twin-cylinder engine, and an ingenious form of belt-driven automatic transmission. In Amsterdam, Dutch opinion was tempered by uneasiness about the wisdom of entering such a competitive class. German manufacturers are engaged in intense rivalry in economy car construction, the Italians are already well in the field, and the French have Citroen and Renault going full blast. The British industry also has its babies, if not in very large-scale production. The DAF company itself is quietly confident, well aware of the difficulties yet content to try to outdo established car makers on cost and ease of driving. The DAF is priced at about £50 less than the popular V.W. Incidentally, the car is built by Van Doorne's Automobielabrieken, N.V., Eindhoven, abbreviated officially to D.A.F., and by general usage the car will become known by the simple word DAF.

The name is well known in the commercial vehicle field. Although demand

fluctuates, at full production the firm turns out about three vehicles an hour, the assembly line mixing heavy trucks with six-wheel-drive army lorries, buses, ambulances and other products. Machinery is up to date, and sufficient financial backing exists to enable the concern to embark on a car which cannot pay for itself unless production and sales get most of the way towards 20,000 within the first year.

During the Show, *The Autocar* staff examined and drove one of the prototype cars during a visit to the factory at Eindhoven, and brief first impressions follow. Production is not scheduled to start until November.

The R.A.I. exhibition hall, referred to phonetically as the rye, is a large, single-storey building whose wide expanse of roof glass let through the spasmodic sunshine of the mild February weather.



The Ford Fairlane 500 Sunliner was one of the 1958 American models enjoying its first European showing at Amsterdam

When the sun shone the preferential stand site of DAF—begrudged by no one—was conspicuous, facing visitors from the far end of the long, central aisle as they entered. Standard and de luxe models, on show in pretty colours, were quickly approved as being attractively shaped. An engine was on special display, looking rather like that of a Volkswagen unit cut in half, and high on the wall was a great drawing of the factory from which swept an imitation road bearing an actual car.

Amsterdam is essentially a show backed by dealers and assembly plants, with the result that some stands hold a collection of different makes. The British industry was displayed in unstinted fashion, however, Morris having one of the largest stands running down one side of the main hall, and Jaguar, Austin, Wolseley and M.G. all having separate arrays.

Rolls-Royce shared a display with sister Bentley, and there was enterprise in the technique of presentation. Between the Rolls-Royce Silver Cloud and drop head Continental Bentley was a tasteful conversation piece of antique furniture and Persian carpet.

A Morris Minor 1000 was poised in the act of bursting through a flower-covered arch of trelliswork; the late John Cobb's land speed record holder received its rightful share of awe, and a battered, mud-splashed TR3 in Monte Carlo Rally plates was cleverly incorporated in an Alpine scene.

Among the foreigners, Renault stole the Show with a television screen forward

of a driving seat rig; while the traffic scene unfolded in front of each guinea-pig driver, a pretty girl with a microphone pointed out the advantages of the Transfluid transmission. The Rally-winning Dauphine was also on view. Citroen had taken the wheels and suspension units off a DS19, smoothly covered the underside and placed the complete unit pointing upwards at a dramatic angle. The Volkswagen agents showed 22 vehicles, including a brace of Porsches, of which eight were lodged on a shelf halfway up their stretch of wall.

British cars enjoy a good reputation in Holland, and interest in them was high. One visitor, proprietor of a small chauffeur-driven fleet, remarked that he had sold two Series 1 Ford Consuls at 90,000 miles (not kilometres) and had another which had covered 110,000 miles. Not one had required engine overhaul;

no wonder the approving eyes of the speaker were directed at the Series II. The Rapier was quickly identified by the Dutch, accepted immediately as a good looking, and naturally the latest Vauxhall Velox and Cresta received much attention.

Vauxhalls are popular in the Netherlands, 3,215 having been sold during 1957, and the Velox and Cresta, now being assembled in Antwerp, are just the sort of roomy, comfortable cars to appeal to the more affluent Dutch families. Enquiries at the stand were eager, and the agents beamed with satisfaction.

With the exception of the Chrysler group, the 1958 Americans were displayed in force, most of them face-lifted quite considerably since last year, but there proved to be little completely new or unexpected. A Ford Thunderbird four-seater saloon was on display; people wondered if this was the beginning of an old story running "new sports car, then four-seater—then back where we came in." However, massive displays of lamps front and rear, a starkly-shaped angular line at the rear of the roof, and a graciously arranged interior, mark the car as being still out of the ordinary run.

An interesting styling side-light appeared on the Chevrolet stand, where rear fins were shown with their 1958 treatment. At what would normally be the sharply-pointed finish, each fin is swept downwards towards the centre-line of the car, and then curved under the tail lamps and wipers before turning again to run

HOLLAND LEADS OFF

forwards. The general effect is less aggressive than that of the usual arrangement, and would probably be accepted without reservation if the mouldings were terminated while still inclined rearward.

American Ford struck a bright blue

note with the Fairlane 500 Sunliner, an impressive convertible whose styling, if boulevard, is certainly impressive; a handsome car in the modern manner. General Motors showed the latest "dream car" for the first time in Europe; the lack of chromium plate on this dramatic "car of the future" was encouraging when viewed alongside the '58 Oldsmobile cars which seemed to

have more chrome than ever on front, back and sides.

Motorists who have visited Earls Court for the London Show will know how dense crowds can be when cars and equipment are the attraction. In Amsterdam conditions are similar, and the news that a new, bigger hall is to be completed in about three years' time was received with pleasure and without surprise.

The DAF

ON THE ROAD

The disguised prototype of the new Dutch car exhibited little roll when cornered briskly. The fitting of an external mirror was prompted only by the temporary covering at the rear



FIRST impressions of the DAF on the road proved to be even more stimulating than had been expected. The amount of room, ease of control, efficiency of the suspension and the novel transmission all tended to exceed any preconceived estimates. The pair of wide doors make entry to the front seats simple, and these seats fold well forward for passengers getting into or out of the rear compartment. Leg room front and rear is adequate for a six-footer, and—partly because the roof panel is covered internally only by a directly applied spray finish—just sufficient head room is achieved at the rear even for tall (hatless) occupants.

The front wheels are rearward of the engine, and their arches intrude into the driving compartment to the extent of limiting lateral foot room. On a short run this did not seem inconvenient but, for the front passenger particularly, the lack of width could become tiresome on a long journey. The driving position is convenient, with the speedometer under a cowl directly in front of the driver, flanked by lever switches for the indicators and lights.

As production will not start until late in the year, the car driven near Eindhoven was a prototype fitted with extras for experimental purposes, including a rev counter. The rear part was still camouflaged with canvas to simulate the appearance of a small pick-up truck. Without such disguise, all round visibility is good.

The engine, already warm when the car was handed over, started at once and ticked over unobtrusively. Up to the maximum of 4,000 r.p.m. no rough periods could be detected, and although the unit is air-cooled and has but two cylinders, the noise level is not uncomfortably high in any circumstances; it certainly does not approach that associated with most air-cooled two-stroke units. When forward drive has been engaged by a small lever on the propeller-shaft tunnel there is no tendency to creep, and the car gets away without delay when the throttle is opened.

The unorthodox, belt-driven transmission is efficient without being excessively fussy; the engine revs freely at first, then r.p.m. decrease as cruising speed is reached and the throttle pedal eased back. It was noticed that when cruising at a steady 2,000 r.p.m.—about 35 k.p.h. or 22 m.p.h.—the engine speed doubled to the maximum 4,000 r.p.m. when the throttle was snapped fully open. At once the torque multiplication was felt, and the car accelerated briskly, the r.p.m. remaining at or near the maximum until the throttle was partly closed again.

The prototype peaked at 70 k.p.h. speedometer reading, but the production version is expected to do about 90 k.p.h., or more than 55 m.p.h. flat out. Certainly the car appeared to have a reserve of braking power and a degree of road adhesion more than adequate for a per-

formance of this class. The brakes on the prototype were light, sensitive and progressive. It was easy to lock the wheels, but not to do so inadvertently; there was no pull to either side, no squeal or grab, and the central hand brake lever operated efficiently.

On a short run in such a precious "working model" no attempt was made to take the car up to the limit of adhesion on corners, but it was discovered that the standard of roadworthiness was very high, and that rough cobbles could be taken at maximum speed without control being impaired. Steering characteristics were nearly neutral (in part owing to even weight distribution) although there was some of the weaving motion on corners taken fast, associated with short wheelbase cars. Roll is limited, even when the car is cornered briskly.

Pleasing details included a wide shelf at the rear with a pronounced retaining lip, two glove compartments in the fascia, an interior width of 4ft 1.2in, and forward hinged doors. While the general basis of the automatic transmission is not new (DKW tried something very similar on a scooter) the DAF people claim that while engine heat can affect belt life on a scooter, or a front-engined, front-drive car, the problem does not arise on their model. The behaviour of the prototype was certainly impressive, and a production model is awaited with more than usual interest.

Books Received

Let's Halt Awhile, by Nancy and Ashley Courtenay. Published by Ashley Courtenay, Ltd., 68, St. James Street, London, S.W.1. Price 10s 6d.

This guide to hotels and restaurants is of good repute, and its complete annual revision is an important advantage. It lists good small and large hotels to visit; there are indications of any attractions of the region and of the hotel, and also of the culinary standards, but it is not a gourmet's guide. Each description gives a good idea of the general amenities.

In style not dissimilar to a sponsored book, this one has the reputation of being impartial, and reliable.

Historic Houses and Castles in Great Britain and Northern Ireland. Published by Index Publishers, Ltd., 69, Victoria Street, London, S.W.1. Price 3s (by post 3s 8d).

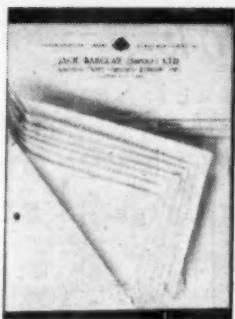
A weak point of many lists of country houses and estates is that the details of their locations are often vague or not given at all; and it is in this respect that this book scores over its rivals. The precise situation of each of the estates listed is given in detail, as also are description, opening times and admission charges.

The book deals with more than 400 of these historic houses, castles and gardens which are regularly open to the public, and 150 of them are illustrated. Their

approximate position is marked on a small-scale map, and brief details of the catering facilities are also provided. The standard of reproduction does justice to the subject.

Book of the Austin A.30 Seven (1951-6), by Ellison Hawks. Published by Cassell and Co., Ltd., 35, Red Lion Square, London, W.C.1. Price 8s 6d.

Latest in the Cassell motoring series of publications, this is a very useful companion for the owner-driver who likes to look after the maintenance of his car himself. Sufficient guidance is given to enable the A.30 owner to tackle a top overhaul, but not to attempt major tasks.



You can enjoy service in the GRAND MANNER — if you have a Rolls-Royce

PERHAPS it is a little unfair to the service side of the Jack Barclay company to suggest that only Rolls-Royce and Bentley cars are worthy of attention from their spanners; the firm has its feet too firmly on the ground for that. But the pre- and post-war products of these two makes are the Barclay bread, butter and jam. It would also be unjust to imply that there are not service departments around the country which can give entire satisfaction to the owners of these and more humble models. Nevertheless, the Barclay method for efficient service is so impressive that, having studied it, one cannot help but speculate on a nation-wide motorists' paradise in which the garage down the road could pull the same thing out of the hat (at its present scale of charges, of course).

You remember when the family chariot was taken in for gear box trouble and came back with an axle whine? And when the indicators were fixed—and went wrong the next day? Well, The Method obviates all that. Maybe you ran a car with care for a couple of years or so, had it serviced regularly but did not keep the bills, and then decided to sell while the mileage was still genuinely low; and the potential buyers were not impressed because you could not prove the facts? The Method avoids that situation, too.

Simplicity is frequently associated with efficiency, but to a casual observer the Barclay system seems one of the most complicated imaginable, using paper in Whitehall quantities which call not only for duplicates and triplicates but even octuplicates. Yet, put to the test, The Method comes through with flying colours; and it is quickly noticed that however difficult its use may appear, the staff who built it up reap the benefits with no more effort than a glance at a file, calling a chassis number into the internal telephone, or filling in a top copy.

Two winters ago a customer ordered a set of snow tyres; as the weather improved he requested that the original covers be replaced and the snow tyres stored. Last winter was mild, and the special tyres remained in store until the recent snowfalls. They were then refitted, the Bentley received routine service at the same time, and the car was taken back to its London owner.

A charming letter from the owner followed, suggesting that only a universal love of cats among the fitters could explain the way in which the car purred; but adding that the snow tyres did not appear to be the ones previously fitted. He explained that they simply did not look the same, and would the service department check with the stores? It took less than three minutes to determine the date on which the tyres were supplied, the make, the date put in store, and, most important of all, the number of each tyre. Thus the customer was not

only convinced beyond any shadow of doubt that he had the right tyres, but was also imbued with the "By-golly-my-garage-knows-its-stuff" feeling.

A file is kept for each car handled by the company, indexed by the chassis number—the one identification which cannot change. Usually a file is opened on advice from the showrooms of a sale, but quite frequently the service department is asked to carry out a complete test and inspection on a used car offered elsewhere. This test procedure, followed by an estimate, is truly formidable. The report takes up four foolscap sheets and involves 318 entries by the testers. Items checked include maximum speed, slow running speed, and, among the instruments for example, the speedometer is checked for total mileage, whether the trip recorder is working, condition of the drive, flicker on the needle, any noise, and whether or not the night illumination is satisfactory. Other details include even the state of pedal rubbers and core plugs, tone of radio, and the percentage wear and sidewall condition of each tyre.

At the foot of each section is plenty of room for the testers' personal comments, and at one side a complete column in which the works-manager enters what he considers should be done, in light of the car's age, value, and so on. The estimate is made out by the appropriate department, and at this stage it is seen that while much paper is used, there is not so much paper work. The estimate is made out once, with copies for customer, filing, and accounts, with a final copy on stiff paper with a "Job Card" heading. When the car comes in the job card is, therefore, waiting for it.

The special cards for the routine A,

B or C services have the various tasks itemized, and each is signed off with the full name of the fitter or electrician concerned. Glances at file after file showed that this detailed plan, followed up and confirmed in writing by the quality inspector, is completed with meticulous care. Not once was there a space blank which should have been filled in, and the final question, addressed to the quality inspector, is: "Are you in agreement with the car leaving the Works?"

Some of the other questions which the quality man has to answer are interesting: "Are all items called for by Tester . . . dealt with to the satisfaction of Tester, and passed off by him?" "Are the tyre pressures correct?" "Are lamps, head, side, tail, dash and interior, all working, also wipers and horn?" And, most important of all, set out in capital letters: "ARE ALL DANGER POINTS INSPECTED AND SIGNED OFF?"

While this recording, checking system was being examined a young man entered the service director's office and remarked laconically, "There's a mink coat in the locker of a car just come in. Should I put in the safe?" "Yes."

This led to another aspect of The Method. Each car as it arrives is closely inspected; accoutrements are noted down, any damage, however minor, recorded, petrol level entered, and a slip fixed to the screen which, among other things, says "dirt is easier to put on than remove."

The average motorist, if there is such a being, will probably be content to take the garage on the High Street as it is, having service costs in mind. But it would be rather pleasant . . .

R. M. C.

VICTOR RILEY—A TRIBUTE BY "SAMMY" DAVIS

TOMMY VICTOR RILEY was, and always had been, a friend from those delightfully precarious days in Coventry when he could be seen almost any day, triumphantly driving the latest Riley tri-car up St. Nicholas Street. And when, very many years later, I drove for him in the Tourist Trophy that same friendliness was abundantly confirmed.

No driver who has made a bad mistake, thereby ruining a good chance of winning very much money, likes to return and report his misdeed to the team patron. When a mishandled skid ruined our chances in one race, the thing which made it worse was the knowledge that Victor, quietly enthusiastic, had hoped so much for success. And what endeared him to me for ever was his absolutely genuine sympathy, his ingenious explanation of the cause, his determined refusal to accept the theory of driver responsibility.

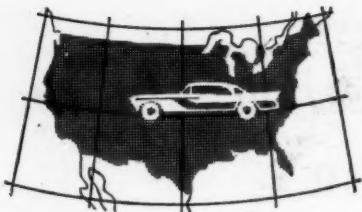
When we did better later on, he was

the first to insist that, this time, it was the driver who had been prime factor. You can imagine that a Riley team had the air of family business, as did his factory. He was superbly honest, so that there was no need for written confirmation of anything agreed verbally.

He was one of those men who made the motor industry, not only because he fought to the bitter end against troubles but because he could always see the romance of the thing, the potential adventure, better than he could the financial gain. He was not an orator, yet you knew that he was saying genuinely what he thought, ignoring guile.

We owe a great deal to men such as Victor Riley—more than ever can be acknowledged. It is a sad day indeed when one comes to the inevitable parting of the ways. And, once again for me, I know that he could never be replaced or equalled, though others do as well in different ways.

S. C. H. DAVIS.



Detroit notebook

KEY TO PROSPERITY: SQUARES AND CUBES;
SPEED AT DAYTONA: SELLING IN AMERICA;
A MATTER OF CENTS

Roger Huntington, A.S.A.E.

BURNING question in America today: "Are people not buying cars because we're in an economic slump—or are we in a slump because people aren't buying cars?" It's not so ridiculous; economists have speculated for years as to the true relationship between economic conditions in the big auto companies and in the nation in general. There is little doubt that Detroit wields more influence than any other single industry, simply because more people are employed and high wages are paid. As one economist said, "As Detroit goes, so goes the nation."

Definitely we are right in the middle of an honest-to-goodness economic recession; production, sales, and profits are well down in almost all industries; unemployment figures creep upward... and all the while prices continue to climb. It's a rough spiral that's hard to control.

In Detroit the big problem is to balance production against sales in the dealerships. So far in 1958 production has averaged about 20 per cent below comparable '57 figures (and last year was far from full capacity). On 1 January stocks of unsold new cars in storage and transit totalled 640,000 units—unusually high for this time of year—and 10 per cent of those were unsold '57 models, so the situation just feeds on itself. Lower production schedules mean layoffs for some workers, so these men don't buy new cars—and they don't buy new stoves and TV sets; so the TV dealer doesn't buy a new car; so more men are laid off... and on and on.

Detroit is not taking it lying down; there's new emphasis on "hard sell" advertising, where you whale away at price and product instead of the "company image." Several of the big companies have changed advertising agencies. All the companies are pushing sales promotion schemes in the dealerships—cash bonuses, free trips, fur coats for salesmen, sales clinics for new customer approaches, and so on—it is a madhouse. But behind all the hubbub sit the economists with their slide rules and charts. The consensus of opinion—a further decline in general economic conditions into early summer, then a rising trend in the last half of '58. Total car production and sales are expected to end up close to last year's figures.

ONE especially interesting design trend on the four new basic Detroit engines for 1958 (two from Ford Motor and one each from Chevrolet and Chrysler) is the move to ultra-low stroke-bore ratios. There's a very good reason, and it has nothing to do with the usually mentioned factors of piston speed and block rigidity.

The real key is valve breathing area per cubic inch of displacement. Look at it this way: Assume we were to hold a constant stroke-bore ratio and valve

lift-diameter ratio as we gradually increase piston displacement. Then obviously our cubic inches will increase as the cube of bore—while the nominal valve breathing area (head circumference \times lift) increases as the square of bore. Thus we would have less and less valve breathing area per cubic inch as the engines got bigger. So the only answer is gradually to reduce the stroke-bore ratio, so cubic inches increase at a rate less than the cube. (Valve area would still be proportional to the square of the bore, though, since maximum valve diameter is limited by the bore.) Anyway, if this stroke-bore ratio drops as displacement increases, it is possible to maintain constant breathing area per cubic inch.

This is exactly what the Detroit engineers have done. The average stroke-bore ratio for all the o.h.v. vee-8s manufactured here in 1951 was 0.95. The average for the four new 1958 units is 0.84. And here are a few comparative figures on valve diameter, lift, and nominal breathing area per cubic inch (all for the intake valve):—

	Diameter	Lift	Sq In/ Cu In
1958 Lincoln	2.09	.444	.054
1958 Ford	2.03	.401	.057
1958 Chevrolet	1.94	.399	.056
1958 DeSoto	1.95	.390	.053
1949 Cadillac	1.75	.330	.044
1951 Chrysler	1.81	.378	.052
1953 Buick	1.75	.378	.052
1954 Mercury	1.78	.333	.058
1955 Chevrolet	1.72	.336	.055

So you see, there's often as much method as madness in Motor City machinations!

Your Technical Editor writes me that he does not agree with the relationship of these two factors, and the ignoring of piston speeds and gas velocities through the ports, which would be too low.

THE famous Daytona Beach Speed Weeks are on us again (second and third weeks in February). It will be interesting to see what the stock cars will do this year, now that Detroit is supposedly out of the competition game. In the last two years, with heavily-financed factory teams from several makers, performances soared out of sight, topping the 140-m.p.h. mark on a couple of occasions (with lots of models over 130). One wonders whether the "backyard mechanics" will be able to match such speeds, even with the latest models.

We'll probably see new emphasis on the modified, or "experimental" classes. Most of our young auto enthusiasts make changes of one kind or another on their passenger and sports cars... and they would be glad to tackle the Daytona mile if they did not have to compete against the powerful factory prototypes. Typical of this group is my friend, Dick Griffin, of Lansing, Michigan, who is taking his modified '57 Corvette down this year. This car is definitely a "mover," at least for a home-made, hop-up job. The engine has been bored and stroked from 283 to 339 cu in (4.64 to 5.66 litres), ports

have been opened up, big intake and exhaust valves fitted, and the Duntov factory racing camshaft has been replaced by a wild Harman-Collins roller-lifter setup. A stock Rochester fuel injection system is used. With 4.11 to 1 rear end gears (plus limited-slip differential) the 0-60 m.p.h. time on this car is 5.1sec. Time for the standing quarter is about 13.3sec, with a speed of 107 m.p.h. at the end! Accelerometer tests suggest a true peak horsepower output (on the road) of about 340 at 5,400 r.p.m. Top speed has never been tested, but should be close to 145 m.p.h. with 3.36 to 1 gears, on the sand.

WHY do Americans buy foreign cars? William Flaherty, business research director for Chrysler Corporation, gave some definite opinions in a recent talk. His department has been making an exhaustive study of the subject to pave the way for a possible Chrysler entry in the small-car race.

"There is no evidence that economy—either of original cost or of operation—is the major determinant of foreign-car buying. Prestige is the most important factor in the decision to buy a small foreign car," said Mr. Flaherty. He did not foresee foreign cars substantially eating into our market for domestic models in any price classes. He thinks that foreign-car market penetration over here will never exceed seven per cent. "The fortunes of the new-car market for foreign makes depends a good deal on the development of used-model markets for them. Foreign-car manufacturers will be forced to innovate to improve their long-term sales. Quality competition will be more marked."

Well, that's one company's opinion. May be it makes a lot of sense, but there's one big flaw: if the prestige and "snob appeal" of a foreign product is the only thing that's selling these small economy cars over here, then how can Detroit hope to make a go of the business? And yet it's obvious, everywhere you go around Detroit, that at least two of the Big Three will be out with small cars within two years!

DOLLARS-AND-CENTS—there's no place in the world where the cost-control problem is as acute as in Detroit. Another classic example is the problem of silencer durability. Customers want them to last the life of the car without corroding and falling to pieces—but they are not willing to pay a dollar extra to get it. Those used on the '57 Chevrolets had a life expectancy of 12 to 18 months; for the '58 models they are spending 35c more—and getting a life expectancy of two years. By going to a stainless steel unit they could get five years or more, at a cost of a couple dollars extra. The buyers are going to pay for a life of 12 to 24 months—and that's what they'll get!



SCOTTISH HILL COUNTRY cannot defeat this 1929 Swift—reported to be in perfect condition—seen on a rough country lane overlooking the Clyde, with the Cumraes, Bute and Arran in the distance

Correspondence

Greasy Windscreens

"*Fumes in the Air.*" I am sorry to explode Mr. Napper's 30-year-old theory on greasy windscreens (7 January). The only part of my car which is not waxed is the roof, but I still get a greasy windscreen. The theories of fumes in the air seem best to me, as the front windows of my dwelling suffer the same malady.

Castel, Guernsey.

J. H. JARMAN.

End to Oil Changing Good?

Puzzle of Lubricating Periods. I was interested to read in Technical Topics (31 January) that Vauxhalls consider gear box and back axle oil changing to be wholly unnecessary, as the absence of a draining facility had me mystified. Such departure from recognized practice can, I suggest, be welcomed as a step forward, only when metal deposits from gear teeth and the like are precluded, and oils which will stand up to their job indefinitely are available.

Wide publicity which usually follows even minor technical achievements has been absent in those matters, and whatever the real intention, the inference could be drawn that the life of such units will be reduced, and that maintenance costs will be forced up, to the advantage of the manufacturer and the trade. Omission of a starting handle is another example.

The same article refers to varying servicing intervals recommended by different makers for similar components. The Series II and III Oxfords have virtually identical chassis and, of course, are made by the same firm. Whilst six (of the eight only) points on the former qualify for a 500-mile service, however, the figure

for the latter is given as 1,000 miles. I am in a quandary to decide how often I should now grease my Series II.

One reason why I do my own greasing is that garages seem loth to jack-up the front end. Are manufacturers over-fastidious in declaring that that should be done, or are garages out for the maximum profit from what is often a fixed servicing charge? If the former, the manufacturer takes an obverse view on engine oil changing, as intervals of 3-5,000 miles are commonly quoted which, I feel, is too much to expect from an oil even when an engine is initially in good condition.

Pinner, Middlesex.

W. J. WARD.

Speed in Africa

"*Selfish and Irresponsible.*" I was very sorry to note (10 January) that you allowed the publishing of Col. McEvoy's speeds on the roads in Central and Southern Africa.

In September, 1956, I was overtaken by those heroes of the Nairobi—Cape—Nairobi record run, in a Morris Isis. On "strip" roads I cruised at 50, and mirror-spotted the car approaching. The driver never hooted! Hoping he would slow down a bit from his 70 plus, I waited till he was about 30 feet behind, and threw out the anchor and "hit the bushes." He

Opinions expressed on these pages are those of our correspondents, with which The Autocar does not necessarily agree. Letters intended for publication should be addressed to the Editor, The Autocar, Dorset House, Stamford Street, London, S.E.1.

Correspondence

slewed past at 70 plus, and continued to slew from side to side of the road for a further 100 yards.

Col. McEvoy condemns himself as a similar driver—a menace to other road users, selfish and irresponsible. The general speed limit in Rhodesia and the Union is 60 m.p.h. But in Rhodesia, on 9ft mat and "strip," the limit is 50 m.p.h. Whoever exceeds these limits is no hero—just a fool!

Salisbury, Southern Rhodesia.

"SOUTH AFRICAN."

Spanner in the Works?

Rationalization Where It Counts. I have just had occasion to tighten a slipping fan belt on my Morris Oxford III, an operation which, of course, meant slackening off and re-tightening the four bolts securing the dynamo. The upper two of these responded to a $\frac{1}{2}$ in A/F spanner (the only flat spanner supplied with the car, incidentally), but the lower two—those more difficult of access, naturally!—were too large for this. For them I used my next size of A/F spanner, $\frac{3}{4}$ in, which dealt with one successfully and slipped on the other, this requiring, as I finally found, a $\frac{1}{2}$ in Whitworth. No doubt a $\frac{3}{4}$ in A/F would have done the trick, but surely I am not expected to lay out several pounds on a set of spanners graduated in 32nds in order to do small home maintenance jobs?

However, the really appalling thing is that four bolts on a small component, each performing a similar function, should require three sizes of spanner. One wonders when the vaunted "rationalization" of B.M.C. will percolate down to those details which affect the customer—or does he meekly continue to provide the money for the grandiose schemes and say nothing?

Swinton, Manchester.

A. H. LANGLEY.

How Far Have We Progressed?

Lack of Leg Room in Modern Car. In 1949 I purchased a well-known make of 14 h.p. car with an adjustable steering column, and sufficient room to put the driving seat back to suit my length of leg, and still leave ample space for the back passenger.

I have had to refuse to take delivery of the 1958 equivalent model, as I cannot get into it or, for that matter, any other modern car that I can find.

I am not exceptionally tall at about 6ft 2in, and I feel there must be thousands of men in my position. We were catered for ten years ago, why not now, even to the extent of the back seat sliding back into the chasm of the boot? Some of us would willingly forgo the luxury of being able to carry about a chest of drawers, for the necessity of stretching our legs.

Dartford, Kent.

L. R. STRICKLAND.

The Case of the Small, "Cheap" Car. N. J. White (17 January) has drawn some interesting comparisons between modern cars and those of the 'thirties. His "vintage" examples were, however, mostly large and relatively expensive cars, and I think the greatest improvement over the years has been the way in which the mass-produced "cheap" cars have overtaken these in standards of performance, economy, safety and comfort.

In an endeavour to bridge the gap between ancient and modern, I have fitted a post-war Morris engine and gear box in my 1934 Lanchester 10. It is now a very pleasant vehicle with a reasonable standard of performance. Would I change it for a 1958 mass-produced car? Give me the chance!

Sheffield, 8.

G. PENNIAL.

Motoring For Its Own Sake or . . . I think a deliberately provocative article "How Far Have We Progressed?" (17 January) seems to be based on the pre-war idea of motoring for its own sake. Nowadays motoring is normally for the purpose of getting from A to B in the shortest possible time with the least effort by the driver, and with the greatest amount of equipment to assist his (or her) comfort, such as two-pedal control, heat, radio and the like. Maintenance is covered by a visit to the garage every 1,000 miles and a tuning (also by a garage) every 5,000 or 10,000 miles. The examples of comparative dimensions quoted are, in my opinion, unfair to modern cars as they are based solely on engine size.

The Austin A.55 is the direct descendant of the Austin 10 via the A.40 Devon, A.40 Somerset and A.40/A.50 Cambridge. The 1,711 c.c. Austin Twelve-Six mentioned in the article [R.A.C. rating 15.9 h.p.] was an entirely different class of car, of limited production.



PARKING METER—but not for perambulators; reader A. L. Popham, of Maritzburg, Natal, South Africa, snapped this amusing street scene at one of Durban's recently installed meters

Generally, current models of the same class and sale have appreciably larger engines than their pre-war counterparts, e.g.:

Pre-war	Current
Austin 7 747 c.c.	A.35 948 c.c.
Austin 10 1125 c.c.	A.55 1489 c.c.
Austin 16 2199 c.c.	A.95 2639 c.c.

Colchester, Essex.

L. E. JOHNSON.

[Whilst we readily adopt all available modern amenities for car comfort, we cannot accept that enjoyment of motoring for its own sake makes us old-fashioned.—Ed.]

Dampers Failed

"Due to More Arduous Conditions." I was interested in Major Maxwell's letter (17 January) on the spring dampers fitted to 2.4 Jaguars. After about 150 miles of motoring in Northern Spain, both front dampers, which had covered less than 10,000 miles, gave up the ghost; one leaked its fluid.

A letter to the makers of the dampers produced the following reply: "They have failed due to the more arduous conditions imposed by Continental touring." They declined to examine the components.

Replacements with harder setting are already showing signs of weakening, although they have done less than 4,000 miles on British roads. It appears that dampers made by the firm concerned have a shorter life than the tyres.

Lincoln.

A. R. LEE.

More Cars With Spares

Higher Compressions for U.S.? I am a mechanical engineer of six years' experience, engaged in the design of equipment for the military; for 12 years, automobiles have been my hobby, and I do all of my own repairs, including coachwork. I have been driving my 1954 Austin-Healey in races for two years. My wife, a mathematician, is my navigator in rallies, and together we have won many trophies during the past three years.

Now the complaint department; genuine replacement parts for the Austin-Healey are handled in a most abominable manner. Castings arrive badly rusted and with precision surfaces scored and nicked; new wings are dented and rusted, requiring considerable repair work before use; chrome trim parts are often heavily scratched; rubber bushes for the suspension and transmission swell and disintegrate when contacted with oil (which is inevitable in service).

The journey overseas is an arduous one, and parts require very careful protection to survive the rough treatment. A coat of oil is not sufficient protection against salt air. Every steel part which is not painted should receive a heavy coat of grease,

be wrapped in oil-impervious paper or plastic and be packed in individual cartons or boxes.

Here in the U.S.A. compression ratios have been increasing steadily—ratios of 9.5 and 10 to 1 are becoming common practice (*The Autocar*, 11 October). Premium gasolines are generally 100 octane or higher; even regular gasolines are 90-95 octane. High performance British cars appear rather archaic with 8 or 8.5 to 1 ratios. Sufficient cars are manufactured for U.S.A. consumption to warrant the export models being fitted with higher compression ratios for increased mileage and performance. I am still hoping for the day when British sports cars will be able to out-accelerate the Detroit Juggernauts. It would be so nice to breathe fresh air instead of exhaust fumes whenever the traffic signals turn to green.

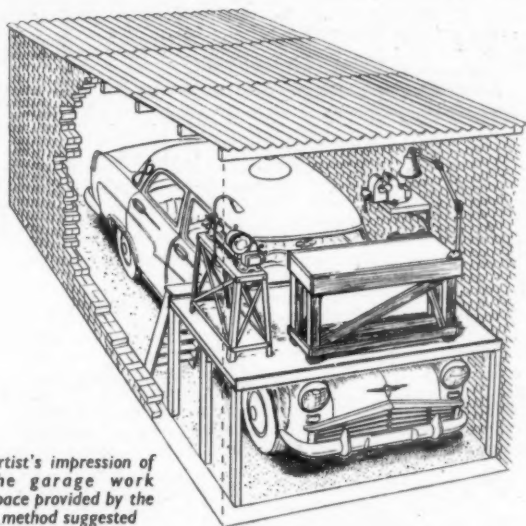
Huntington Sta., New York.

DAN F. STANFILL.

Garage Working Space

There must be many motorists who would like to have a small workshop, but have no unused floor space in their garages. I overcame the difficulty by the method shown in the accompanying drawing.

If the height to the garage ceiling is 10ft or more, there will be ample headroom over the workshop floor, provided the necessary clearance height over the radiator cap is not more than about 3ft 7in. There is room on my workshop platform for a 3½in



Artist's impression of the garage work space provided by the method suggested

lathe, a carpenter's bench, and a small bench for an engineer's vice fixed to the wall.

The materials are few and simple:—three pieces of 2½in angle iron should be cut to a half-inch less than the width between the garage walls; one flange of each angle should have a ½in dia hole drilled ½in from each end; six pieces of 3in by 2in timber should be cut 2½in longer than the clearance height of the radiator cap.

Three of these timbers should be placed against each side wall of the garage and fixed with wall hooks driven into the brickwork; rag-bolts fixed in the wall could be used instead and the timbers drilled to suit, but wall hooks have been found to be quite satisfactory. After the six timbers have been fixed in position, the angle irons should be laid on them and secured by 5/16in coach screws. The flanges of the front and back angles must be upwards and that of the middle angle downwards.

A few old scaffold boards are now required for the flooring. These should be cut so that they will drop into the space between the flanges of the front and back angles. A step ladder is needed to reach the platform. An addition which is well worth while is to lay some linoleum over the scaffold boards; this will obviate the annoyance of the odd screw falling into the cracks between the boards, and it also makes it easier to sweep.

Even if the garage ceiling is not high enough to allow for headroom above the platform, the same method could be adopted to make a very useful additional storage space. In this case it would not be necessary to have the platform so wide; two pieces of angle iron only would be required.

London, S.W.15.

J. B. GILBERT.

Light Patterns

Dangers of Being Misled. You will be aware that in recent years a good deal of research has been done on runway lighting systems, from which a pilot can judge the position and altitude of his aircraft by observing the appearance of a known pattern of lights. A few recent journeys in thick fog make me realize how closely allied to this process is driving in such conditions; the driver uses "cat's eyes," road signs and the lights of other vehicles to judge his position and, to some extent, speed.

I have had two cases of completely mis-interpreting my "lighting pattern," simply because it was quite different from that expected. First, I found myself approaching at what appeared excessive speed, the rear of a very slowly moving car (there were no "cat's eyes" on the road). This proved to be an approaching car fitted with very deep amber head light screens, when its side lights also came into view.

In the second case, a car approaching head-on proved (after a few hair-raising seconds) to be the pair of "cat's eyes" at the brow of a hill where the white line divided temporarily.

It would be interesting to hear of any similar experiences from your readers, for at worst "forewarned is forearmed," and at best we may hear whether this problem is receiving any attention from the designers of our new roads.

Little Rissington, Glos.

BRIAN CARROLL (Flt. Lt.).

OPEN LETTER TO MANUFACTURERS

Advice from America. ... After 48 years of undiminished interest in automobiles and with continued preference for the European makes, I am taking the liberty of making a number of suggestions in the hope they will prove constructive and worthy of application.

Stop "Americanizing" your products! Americans who want them enough to spend the money to buy them have a variety of reasons, such as lower first cost; lower use, maintenance and depreciation costs; compactness and manoeuvrability; difference in appearance; efficiency and performance; and so on. I think not one in ten thousand purchasers buys because of some similarity to an American product.

Stop underestimating us! Please respect us as much as you do your own people. We are not all idiots, unmannerly bores and/or offensive and ignorant braggarts. We do not all buy automobiles as easily, casually and carelessly as a toy with a view to "trading it in" annually; an attitude of snobism, or divorce-ment if the marriage doesn't suit!

Maintain or return to quality! Quality of concept, materials and workmanship—and let them be European, don't "cut corners." Send us your best, not a compromise or your worst. Your best will receive support and gain you profit; compromise and inferiority will lose you market.

Don't be greedy! Don't overproduce, don't force the market. You cannot defeat the natural law of supply and demand any more than could our own producers. Furthermore, you will invite legislation against the imported product which will prove restrictive and costly both to you and your American outlets.

Be insistent that your subsidiaries and/or importing distributors pick their dealers with the greatest care. They have, for

the most part, been all too willing to sign up anyone having a reasonable facility and some operating capital. I believe the first considerations on the part of the prospective dealer should be knowledge of, and a preference for, the product, and an indisputable service-mindedness. He must be willing to stock parts (you must be able to supply them!) and render good service at fair charge.

Stop offering your products through established American automobile dealerships! You and the dealers must make up your minds whether to be fish or fowl. An overwhelming preponderance of present American dealers and salesmen are not mentally constituted to present the products properly. The products are different, and require a different attitude. Your best producers demand that our mechanics be schooled. Why not the importers, dealers and sales representatives?

Don't set up too many main dealers! Don't be tempted to enter into "competitive penetration"—it will backfire as it has done in American products. It will develop into intra-mural competition and result in price-cutting, financial loss and depreciation of the product value, respect and market. Use, rather, the "co-operative saturation" method and protect your representation; their investment, market and profits; and thus, your own.

Be sure your dealers are set up to make a fair profit! The current domestic overall profit picture (dealers; all makes, all states) is a poor one; approximately 1½ per cent for a year's operation!

Let all of us remember the forgotten man—the consumer. It is his dollars that keep all of us in business.

Reading, Penn., U.S.A.

J. R. S.



*Systematic Inspection
Before Signing . . .*

AS SEEN . . .

USED car buying can be a risky business, they say; and they are right. Let us look at these risks and see how to guard against them.

One serious danger is that of paying for a car and then discovering that you have not become the owner. It happens almost every day: either the car has been stolen, or—the lesser evil—it is the subject of a hire purchase transaction and is the property of the finance company. You can guard against this by buying only from an established dealer, but in private sales remember that possession of the log book does not necessarily signify ownership of the car. The best precaution is to ensure that the man who sells it has a satisfactory address from which he cannot easily “disappear.” The same applies to cars sold while under hire purchase contract: there is no dependable way to check against this, but it is a safeguard if you know that you will be able to trace the vendor in such a case.

Another risk is that you may buy a car which has been misrepresented—a 1946 Vauxhall 14, for example, which later turns out to be a pre-war model worth half the price you paid. Here the log book is a safeguard—it gives the date of original registration; but as a double check have the brief details of the description which is claimed for the car written on your official signed receipt.

A further safeguard: pay by crossed cheque. Banks don't like cancelling cheques, but if things go seriously wrong with the transaction within a day or two you will have this emergency “safety valve.” Incidentally, in selling a car, never accept a cheque until you have telephoned the bank to confirm that the cheque will be honoured; if the banks are closed it is better to wait until they are open than to take a chance.

Are you about to buy a rebuilt crash victim? This sounds depressing, but it is worth facing up to the hazards of used car purchase because it is so easy to eliminate them. Sometimes

a car that has been rebuilt after an accident, with new chassis or body shell, new steering parts, and a complete check for damage or replacement of all moving components, can be almost as good as a brand new car. But if there has been an accident you should be told, and should have full details of the repairs carried out. Doors that don't fit, and a surprisingly early respray (indicated by tell-tale paint marks under the bonnet and inside the door surrounds), are the clues. It is an obvious breach of the contract for the vendor to deny details of such a major accident at the time of sale; but it may be as well to ask in any case. In properly rebuilt cars such work is very difficult to detect.

Rust is a major problem. Five to seven years is about the age at which really careful attention needs to be given to the underneath of a car, but on some vehicles parked always in the open on damp ground or in seaside districts, corrosion can be accelerated. It is the highly stressed parts that matter—the sections of the chassis that support the rear spring mountings, and the body side channels beneath the doors which often run forward to carry the load of the engine and front suspension. Surface rust doesn't matter, but it is quite common to find old cars on which a screwdriver can be pressed straight through the metal: better to look for another example.

Rain runs down side windows and keeps the inside surfaces of doors almost permanently moist, and rust can be rapid there. Pimples of rust on the outside of a door, about an inch from the bottom, show that corrosion is eating its way out from the inside; and if you find that the underneath edge of a door consists of rusted, broken metal this is another warning sign.

Oil spraying once or twice a year on rusty metal will practically halt the progress of corrosion, and so if you are prepared to do this you may take some liberties in buying a tolerably rusted car.

For this inspection the car must be raised on a hydraulic lift, which private vendors and many dealers may not be able to provide. A local garage will normally be glad to help by lending their lift for the purpose, and while the underneath is on display you can check other things.

Are the brake hoses sound? There are normally three—one for each front wheel and one for the rear; signs of cracking may be detected at the ends. It is illegal to sell a vehicle which is in an unroadworthy condition, so you may ask for faulty brake hoses to be renewed, and the same applies to the exhaust system. Try the screwdriver test, and ask for repairs or replacement if the silencer is obviously unsound. Under the front of the car have a look for signs of yellow stains away from the overflow pipe which will show where rusty water has leaked from the radiator—and may still be leaking.

These faults have been mentioned now because they fall in place for convenient checking when the car is on the ramp; but they are out of place in order of seriousness. Next problem in the importance sequence would be an engine that is so worn that it must soon be replaced. The time to listen for sounds of excessive wear is at the end of the trial run, when it is thoroughly hot and the oil is thin. The unimportant noise of wide tappet clearances is detected as a regular, ticking sound when the engine is idling. But a deep rumble at high revs, particularly noticeable as the engine speeds up, is serious—it indicates worn main bearings. A more metallic, rhythmic knocking may lead to suspicion of piston slap, which is another danger sign if it is noticeable when the engine is hot. Piston slap in a cold engine—in fact, all noises which disappear as the unit warms up—are less critical.

Checks for engine noises should, of course, be made with the bonnet up, and it pays also to watch whether blue smoke pours out of the exhaust when the engine is revved after idling for a few moments. This will suggest that piston rings or valve guides and seals have worn, and oil consumption may be

COMPULSORY VEHICLE TESTS

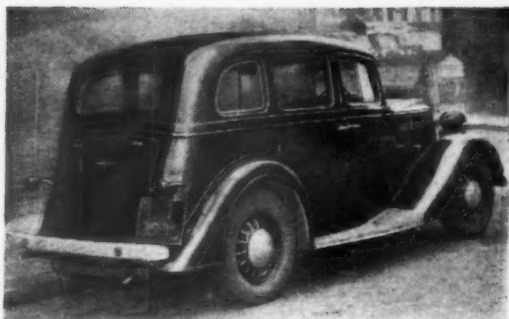
THERE HAS been much unnecessary alarm over the prospect of compulsory vehicle inspection, and many owners of older cars have been afraid that this part of the 1956 Road Traffic Act is calculated to drive them off the road. It is too early yet to be certain quite what form the tests will take, but it is known that they will deal solely with brakes, lights, and steering. The oldest and most neglected cars can and should be thoroughly sound in these respects, so there is little to fear at the prospect of the start of testing.

Resilvering or replacement of head lamp reflectors is relatively inexpensive, and in many cases adjustment only will be needed to bring brakes up to an efficient standard. There may be more trouble with some of the cable operated braking systems. Steering troubles may lead to more expense, but most steering boxes lend themselves to adjustment—a skilled job—and replacement of swivel pins costs about £5.

At any time now the Minister is expected to release proposals for the compulsory inspection scheme, and the details of Mr. Watkinson's plans will then have to be ratified by both Houses of Parliament. It is thought that 1 January 1959 may be chosen as the day when the tests will start.

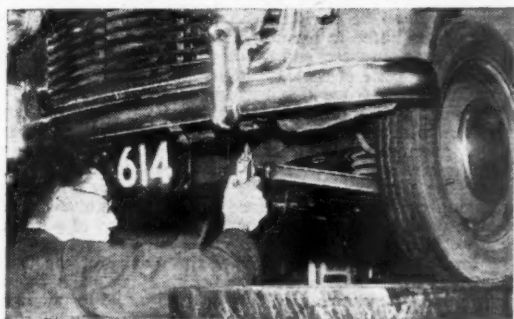


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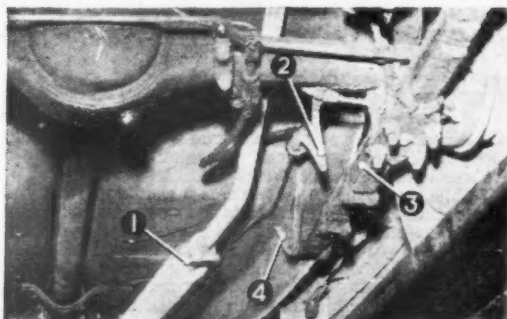


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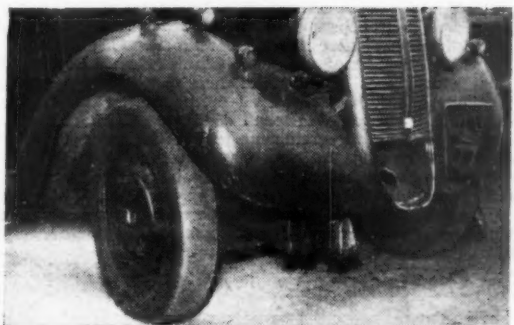


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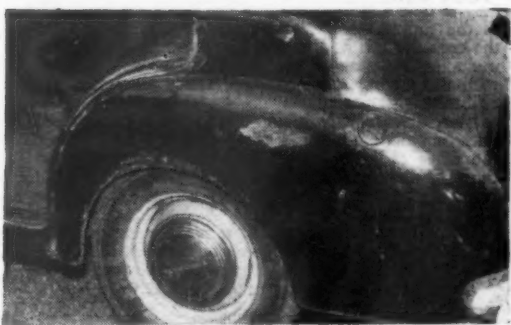


4

...AND APPROVED



5



6

- 1 Purchase of a quality car at a low price but in poor condition, with the idea of putting faults right later, is often tempting. Here is a Rover that has seen better days: paintwork is dirty and rust-covered, hub-plate missing, and there is extensive unrepaired accident damage. Repairs will be costly, especially if the mechanical condition is in an equally sorry state, as may be suspected
- 3 A mechanic greases chassis points on a Hillman before sale. This and other routine service will normally be carried out by an efficient dealer, but it has the additional effect that wear in the front suspension linkages will give rise to less noise on the demonstration run
- 5 It is on a really old car such as this Hillman that the progress of rust needs to be watched. Under the wings the metal is beginning to break away, but at the rear, one spring anchorage has been replaced by a new piece welded in. The bald tyre at the front indicates another expense which will soon have to be faced

- 2 There is a great contrast in condition between this pre-war Vauxhall 14, which has obviously been cared for, and the neglected Rover on its left. The Vauxhall is now over 20 years old, but evidently it continues to give good service and still offers the comfort and accommodation that are not to be found in some younger small cars
- 4 Arrows indicate the points to check while the car is on the lift for inspection of the underbody: test the silencer (1) for weakness, the brake hoses (2) for cracking (the rear axle hose is shown), the rear springs (3) for broken leaves, and the spring anchorages (4) for advanced corrosion
- 6 Rust again, on a younger car—a 1949 Vauxhall Velox which is thus not yet ten years old. It has replaced the paint over a large section, and the inner edge of the rear wing and the door surround are corroded all round: special attention should be paid to the underbody. The interior is misleadingly good



One or two models earn themselves a good reputation for long life with a minimum of repairs; among them is the Standard Vanguard I. This is a factor to be considered in making a choice, and selection of a make and model should be made *before* examining the market

AS SEEN . . .

excessive. Fumes and vapour from the crankcase breather pipe are another warning sign of an engine that is nearing the end of its useful life before overhaul.

While the bonnet is up, there is a good opportunity to check the dipstick. If the oil is clean it is a good sign: either it has been changed for sale (which is a point on the right side), or the engine is in good order, and the oil stays clean in any case. Even detergent oil does not get dirty in thoroughly fit engines. But if it is black, it is at once a danger sign: either the oil has not been changed for months—a bad general indication as to condition—or the engine is sufficiently worn for there to be piston blow-by and the mixture of combustion gases with the sump oil. *Seer clear.*

A table of approximate repair costs is given below, from which it will be seen that the approaching need for a repaint is the next most critical fault. Next in order are gear boxes and rear axles which will soon be due for replacement. These may not be easy to detect, but on the trial run listen for low groaning noises as the car moves off from rest, loud transmission whine from the crown wheel and pinion on drive and overrun in top, and a periodic thumping as the car slows to a standstill in neutral with the engine switched off. These all indicate major wear, or broken gear teeth.

Also, drive slowly in top gear, and then jab the accelerator once or twice: a jolt and a loud "tunk" as the engine takes up the drive indicate general wear in the transmission including the propeller-shaft universal joints. Incidentally, a faint whine from the back axle is not usually serious; it is even present on some new cars.

Checking for these faults raises an important point: that the buyer should always insist on driving the car which he is planning to buy—having first made sure that he is insured to

do so. Even critically worn cars can be made to progress smoothly and quietly to a misleading degree by a skilful driver, and dealers or private vendors who are not able or willing to allow the buyer to drive the car should be treated as "black"!

There are other things to observe while driving on the test run—steering, suspension and brakes—and they should be checked and considered separately. After a corner, the steering should unwind to the straight-ahead position without assistance, and there should not be noticeable wander on the straight (unless there is a cross-wind) nor should there be appreciable delay in the response when the wheel is turned. Notice whether the front of the car (or the back) pitches up and down over some uneven surfaces; if it does the dampers—a common weak point on used cars—are suspect. Then the brakes—unless they are obviously at fault it is unfair on the owner of the car to make a crash stop, and unnecessary. Provided they give progressive retardation without pulling on the steering as pedal pressures are increased, the system cannot be seriously at fault.

Some Faults Are Obvious

Other troubles will be immediately apparent without specially looking for them. Incorrect functioning of the clutch, gear change, instruments, starter, dynamo, trafficators, hand brake and so on will all be obvious, and do not condemn the car. They should be borne in mind as expenditure which may have to be made after purchase, and which should be kept in mind as additions to the price of the car. From the review of last year's used car Road Tests (page 273) it will be seen that it is unusual to find a car of any age on which there are no faults at all, and average cars with no more than three or four black marks are also rare. Normally, cars are either mainly fit, or have come to the stage where a great deal of money needs to be spent on them. If the table on page 276 is applied to a car which you are thinking of buying, and related to the approximate repair charges, it will be seen at once whether it is worthy of purchase or not.

The important thing is to consider the gravity of the faults revealed, and this has been the theme of this article. A broken starter motor, for example, will only cost £5 or £6 to put right, but noises from a back axle or gear box may warn of more serious trouble. And a car with five new tyres may be £30 or £40 more valuable than one on which they are all smooth.

If you are not confident of your skill to assess a good car and to avoid buying an unsound one, the motoring organizations both have schemes for inspection of used cars for members. The A.A. charge £4 5s, and there is a waiting list of about three days at the present time. The telephone number for the London area is FULHAM 9561; provincial applications should be made through district offices. For the R.A.C. the charge is £4 4s within 20 miles of one of the Club's offices. Beyond that there is a charge of 1s per mile; there is no waiting list and application should be made direct to the nearest R.A.C. office (in London, telephone WHITEHALL 4343).

Dealers are naturally reluctant to cut the price they have quoted by even £5; but you may ask for "cannibalism"—that is for a radio or heater, or perhaps a better tyre, to be transferred from another of the cars which he has in stock before the sale. Finally, time should not be considered important in used car buying. It is better to risk being beaten to it by another buyer, than to purchase when in doubt.

J. S. M. B.

COSTS OF DEFECTS IN POPULAR CARS

REPAIR CHARGES sometimes vary considerably from one make to another, according to the labour involved and the cost of materials. The figures in this table refer to popular cars—not luxury, special or foreign makes—and serve as a general guide to the expense which may have to be added to the cost of the car, to put it in order after purchase. Where applicable fitting charges are included

Mechanical and Electrical Repairs	Small Car £	Medium Car £	Body Renovation	Small Car £	Medium Car £
Reconditioned engine	40-55	50-70	Respray (car not seriously rusted)	40	60
Decarbonize and grind valves	6-8	7-10	Rechrome a bumper bar	4-5	5-6
Fit oil control rings	12-15	15-20	Supply, fit and spray a new wing (front or rear)	10-12	12-15
Reconditioned gear box	20-30	30-45	Renew roof linings	12	15
Reconditioned differential assembly	20-30	30-40	Complete set of inexpensive seat covers	5	6
Reline clutch	7-10	10-25	Re-trim front seats (leather cloth)	3½	7
Renew swivel pins (old cars)	3-5	4-7	Renew canvas hood (p.v.c. costs one-third more)	10½	14
Overhaul front suspension assembly (excluding dampers)	10	10	Renew carpets	7½	10
Renew rear spring	4-5	5-6			
Renew 4 dampers	10-15	12-20			
One new tyre	6-7	7-8			
Renew complete exhaust	5-6	6-7			
New battery	9½	11			
One sealed-beam head lamp	1	1			
Renew three brake hoses and bleed system	2-2½	2-2½			
Supply and fit eight exchange brake shoes	8-10	10-12			
Renew steering box	5-8	7-12			
Renew steering column gear change	6-10	6-10			
			Supplying Deficiencies		
			Simple pillar jack	2	3
			Complete toolkit	14-4	14-4
			Fog lamp	3-5	3-5
			Windscreen washer	1½	1½
			Recirculatory heater	10	10
			Radio (including fitting and aerial)	24	24

The NEW CAR arrives •

POINTS OF GOOD TREATMENT AND PRESERVATION

TO the owner of a recently acquired new or good used car, thoughts occur about discovering any defects in the model, and also preserving it. Running-in was thoroughly covered by the Technical Editor (*The Autocar*, February 7). But for new readers, that interesting analysis may be simplified to these main points:—

Engine and transmission fits are so precise in these days that the need for running-in is mainly to provide perfectly work-hardened surfaces, and not to rub down high spots. Surfaces are best run in by light, fast motion; the need to avoid over-revving and high speeds is obvious. But many go to the opposite extreme, driving too slowly and making the engine "slog." Some of the larger cars thrive on a surprisingly high cruising speed in their first few hundred miles; the agent or handbook is the authority in each individual case.

Indirect gears may be used more freely, both to run them in and to spare the engine hard pulling on full throttle. Local stop-start work is harder on an engine than long runs, and ideally, perhaps, the owner would do his running-in on a lengthy, not too hasty, pleasure trip.

Before a new car has perfected the surfaces of all engine and transmission parts, there may be periods of slight roughness or vibration in both engine and transmission, while a new rear axle may be noisier than it will be later on. The anxious may consult the dealer about these sounds, but if he passes them as normal, there is no need to doubt him and go on worrying. If such defects persist towards the end of a proper running-in and guarantee period, that is the time to consider them more seriously.

It is an interesting point that tyres should also be run in during their very earliest life. When brand new, they may be a fraction less supple than when run-in, so that vibrations or sounds from coarse-surfaced roads are felt at first, but later cease.

It is possible for a new car to run so coldly during running-in, if this is done perhaps too quietly during winter, that there may be carbon formation and consequent pinking. This should later be swept away by normal driving, or what the quietest owners might regard as a burst of unaccustomed speed!

Some people hold that it is a good idea to remove a cylinder head after running-in, in order perfectly to lap-in the valves. In fact, it seems not to be required by modern cars, and nowadays it seems to savour of art for art's sake.

The general tightening-up of nuts and bolts, studs and gaskets which settle in early life, usually has its final application at about 500 miles. But it really is a good idea, especially for cylinder head studs, to have another check at 1,000 miles; other points for attention are manifold studs, leaf-spring bolts and manifold-to-exhaust joint.

An agent may not check—but an owner should—the fastenings of accessories, and the various trim screws in the body. In dealing with a new chromium-plated one, it may be desirable slightly to blunt the edges of the small screwdriver he uses; this helps to keep a car smart, for chromium is easily scratched and cut by sharp weapons.

Choice of oils

Gear oils of the recommended viscosity do not seem to cause any worry to owners. It is worth noting that the EP ("extreme pressure") characteristics of these oils consist of additives which take over in circumstances where extreme load breaks down oil films, and that in so doing, they

are said gradually to exhaust themselves. In new gears, these demands are greater and this is the main reason why an oil change is desirable. In addition, the only impurity that gear boxes and rear axles know—metallic dust—is produced in the running-in process.

That is the case for changing transmission oils at intervals, but one large car maker no longer thinks such changes necessary.

Engine oils do seem to be a source of worry, because the owner has to exercise choice between the various kinds, subject to the viscosity (or thickness) recommendations in the handbook. It will clear the air to affirm that no major oil company puts forth an inferior oil, but there is the difficult question of such terms as plain, detergent and multigrade.

"Detergent" is the property similar to that of household detergents, dissolving undesirable solids and semi-solids—in the case of engines, thick sludge. There will also be anti-corrosion additives. When detergent oils first came on the market—now, practically all premium oils are detergent—the valiant old engines of pre-war vintage had accumulated much sludge. When detergent oil was inserted, there could be an unfortunate halfway period between sludge lodged and static, and sludge dissolved. At this dangerous stage, there were cases in which dissolving clots of sludge floated loose and blocked oilways.

Another difficulty in which detergency played some slight part was in a post-war period when the cars of a great overseas country used substitute materials in valve-operating gear (for the sake of economy); and ours used substitute materials because they couldn't get the best ones. Obviously, a detergent oil could drain off valve gear when the car was at rest, and give it a period of relatively dry running when started. But this was never more than a slight contributory factor to the trouble caused by camshafts and tappets of poor materials, subjected to the stronger spring pressures called for by higher performance. There is not really an argument today in favour of deserting oil of non-sludging and non-ring-gumming properties in favour of clinging to oil which clings to tappets.

"Multigrade" is a term often confused with "detergency." Multigrades are premium oils, and like other premiums, usually have the property of detergency. But the word means that they are blended so that they minimize the undesirable property of normal oil—being thick when cold, and thin when hot. Thus, a multigrade SAE 10-30 is claimed to be as thin as a normal 10 when freezing, and as thick as a 30 at water boiling temperature. Now, a normal 10 is ideal for starting, and will find its way round the engine quickly, but is rather thin for normal running. A 30 grade, good for cruising, is somewhat heavy for winter starts.

The multigrade character can be used for quite a different purpose. An SAE 20-40 or 30-50 may have the thickness at speed desirable in a worn or overworked engine, while not having excessive thickness when cold.

In a new car, the position may be summarized thus: multi-



The NEW CAR arrives...

grade oils are of great value in local running and frequent cold starts; they have less benefit in the long-range car.

The cooling system may be preserved from scale and corrosion by either of two means: adding corrosion inhibitor to the water, or leaving the anti-freeze in all the year round.

Now how about rust? Obviously, any signs of this appearing at some small fitting would be met by the owner with a discreet drop of thin oil: but it is worth noting that if you want to "oil" at some place against which people might brush, or somewhere where oil might spoil wax polish jobs, wax can be used as a simple lubricant; hinges will turn freely on liquid or emulsion wax, for instance. If there is any fault in door catches, so that the door has to be slammed, the percussion may flake neighbouring paint, but doors that are difficult to close, merely because of the good draught sealing, are nothing to worry about.

As a so-called "integral construction" car has its hull made up of many pressings, spot-welded together, there are often line gaps between these spots. Many makers or agents fill such joints, so that they do not admit water—an excellent practice. One recent model had a noticeably gapped joint between its roof and tail panel, and good agents would fill and paint it before delivery, as this involved less trouble than attending to it later. Other such gaps may occur in the region of the roof gutters. There is no particular difficulty in an owner doing that sort of thing himself: but it is dealt with elsewhere, in a review of preparations for restoring used cars.

The finish of a new car seems quite often to worry owners. Baked synthetic enamel has the reputation of being harder and more lasting than sprayed cellulose, but sometimes it shows small patches of imperfection or roughness. The impression is of patches of tiny bubbles, or there may be slight pimpling. Garages cannot oven-bake a portion of the car, of course, so any rectification of the defect may well involve removal of the finish, and spray-cellulosing. But with a coloured car, this may not be a good idea; cellulose and baked synthetic may vary in their ageing and colour change, because of the different media carrying the pigment. It is perhaps best to rely on polishing to improve the surface.

The same applies to that uneven surface of cellulose which is sometimes called "orange peel." Cynical owners have even been known to say that they welcome it, as evidence that the finish is thick enough to be uneven. Polishing is best; and if an owner is impatient for a smooth finish, it may in this case be done with a fairly drastic polish, being careful not to overdo the treatment.

For the preservation of car paint-work, and also of chromium-plating, there does not seem to be anything better than the old-fashioned hard Simoniz wax, based on caruba palm wax. The inclusion of powder content or quick-spreading ingredients quickens the job, at a small expense of film strength. In waxing, it is worth while taking some trouble to get wax under motifs, decorations and rubber flanges.

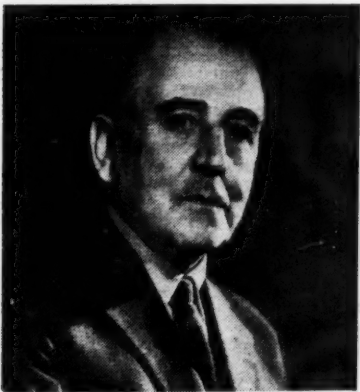
Except for feather-light dusting, dry cleaning of cars is very doubtful practice, and a muddy car should be allowed to stay so until floods of water can be brought into play. In winter, at least, it may be a better use of a fine day to get the car dry than to wash it. The life of smartness and soundness of steel bodies does depend to some extent on the proportion of their time they spend in the damp or the dry condition. But if a city is having a corrosive period of fog, or a long rainless spell in which the atmosphere deposits acid soot, then a car should be washed as often as possible.

Many new car owners consider protecting the underside with one of the sprayed or brushed underbody compounds of bitumastic rubber, perhaps with an asbestos flock content; these do silence road noises, and help to preserve the hull. If the job is done, however, it should be undertaken early, because once the car has oiliness and loose rust underneath, the most elaborate steam cleaning is required.

If a car is to stand in the open at nights and all day, such a precaution is wise, but it may be unnecessary as preservation—however valuable for noise-damping—if a car spends its off-duty hours in a good garage. In that case, having the undersides sprayed with heavy penetrating oil at a service station, perhaps only twice a year, in spring and late autumn, is adequate. Oil has little staying power on new paint and bright metal, but where there is slight rusting on an open surface, or between two layers of sheet metal in such a place as the wing-to-body joint, then oil will be absorbed.

Thus oil-spraying may be delayed until the car has been in service some time, and it may be done infrequently but very thorough, rather than often and superficially. J. R. DAVEY.

W. O. BENTLEY—an Autobiography



THE nineteen-twenties were fabulous days, and the great men of the period were themselves fabulous; among them was W. O. Bentley, whose name will be remembered and respected, so long as there are road vehicles, as the designer who put sports cars on a pinnacle—which, many feel, has not been surpassed—and whose autobiography has just been published.* But there is more to it than that; his genius provided for the peak of an era; the arrival of the "hungry 'thirties" saw the end of those gracious

days, and with their crumbling fell the social distinctions that had crystallized in the word "Bentley".

He built for the rich young man of the period, who appreciated—and could afford—his cars; if a novelist wished to bestow his hero with an unassailable social (and sporting) *cachet*, he gave him a Bentley. It is not just nostalgia that gives the terms "Red Label" and "Blower 41" much more significance than their face value alone; if there is a Bentley Cult (the Bentley Drivers' Club has over 1,300 members), it is based not only on a sound mechanism but on a hankering for the days that are gone.

It is perhaps strange that such a quiet, gentle and retiring man as "W. O." should have created such large and forceful cars—and that his first love should have been for locomotives. In his book, however, the motives behind their creation become clearer; brought up in a wealthy home that knew perfection, it is natural that he should have sought perfection in his creations; the immediate reactions of his public, and their ensuing reactions up to the present day, have proved his concepts and ideals to be sound.

Few people except those who, because they hold his cars in high esteem, have bothered to learn a little about their creator, appreciate quite how much "W. O." has achieved in his 70 years. There was the D.F.P., a small French Edwardian for which W. O. and his brother H. M. Bentley were concessionaires in this country. By skilled tuning and driving, "W. O." himself set

up records at Brooklands and competed regularly and successfully in these cars until he had built up a fine reputation for them in this country.

He describes a visit to the Doriët, Flandrin and Parent works, when he chanced to see an aluminium piston in use as a paperweight on a desk. This piston started a train of thought—and the eventual fitting of aluminium pistons to the D.F.P., bringing improved performance and further competition successes. When the war came, he succeeded in interesting the Admiralty in such pistons; later they were adopted by Rolls-Royce, Gwynne and Sunbeam—while "W. O." himself designed and built the BR1 and the larger BR2 rotary aero engines. The BR2, through Bentley's painstaking research and visits to the men in France who were using his engines, proved to be an important contribution to Britain's supremacy in the air.

The book bristles with little inflections which bring home the passage of time since those days. Bentleys used to race on around £2,000 (sometimes less) a year; today, even a relatively small firm can spend more than that in a month. As he points out, this was a small price for the best part of the front page of the *Daily Mail*—which the Le Mans victories used to warrant in those days.

It is a pleasant but not unexpected feature of the book that he pays high tribute to the drivers—the "Bentley Boys" and their light-hearted goings-on, many of which are chronicled—and to the mechanics, many of whom are now prominent in the industry; it is good to think that their success must be derived to a great extent from "W. O.'s" teaching and example.

*W. O.—The Autobiography of W. O. Bentley. Published by Hutchinson and Co. (Publishers) Ltd., 178-202, Great Portland Street, London. W.I. Price £1 1s.

Eighth Yorkshire Rally

AUSTIN-HEALEY WINS Y.S.C.C. EVENT IN FLOOD AND MUD

REGULATIONS for the Eighth Yorkshire Rally said that locked axles, four-wheel drive, chains and other devices to help competitors through the arctic conditions usually associated with this rally would be permitted. In view of the weather encountered on the route, life rafts and frogman equipment would have been more useful—during the previous week snow had vanished in a thaw which, helped by heavy rain, brought torrents of foaming brown water down from the hills, filling the rivers of the East and West Ridings. Round many corners there lurked flooded sections of roads, and even on the moors the roads were awash, with the rally cars flowing through like so many speed boats.

No Yorkshire Rally would be complete without a special section devised by Mike Wilson and his fellow clerks of the course, Dick Haley and Tommy Wise. To get to this year's special involved approximately 90 miles through country seamed with roads which gave navigators no chance at all to lift their heads from maps and route cards. South from Ilkley down to the east of Huddersfield, still south to a desolate road junction on Midhope Moors, then west to Woodhead and then north, the rally fled through the very dark night to Ripponden, a few miles southwest of Halifax.

Hard Going

The section consisted of six miles of narrow, tortuous lanes lined with very hard stone walls; required average speed was 30 m.p.h. and the route card was issued to competitors only 15 seconds before they were "off." There was no let-up, and the sand and gravel put down by roadmen upon the earlier ice gave the road a ball-bearing surface. Gold, the ultimate winner, put up the best time here in his Austin-Healey. Soon after the section, E. Smith and the crew of his 2.4 Jaguar had to work quickly to change a punctured tyre and wheel. H. Jacoby, TR3, came to a short halt with a mysterious under-bonnet noise, which turned out to be a loose battery, and then as the marshals at Davy's Hill, south-west of Skipton, took up their positions, cars began to appear from all directions, led by Ken Lee in a Renault Dauphine fitted with twin S.U.s.

Past the control at Skell Gill Bridge where the marshals were keeping warm with the help of a huge bonfire, and where R. W. Curzon said he had spent some time lost in a farmyard with his Morris Minor, they sped to Thirsk and the wild moorland towards Whitby. The route became extremely tricky, narrow roads on the lin ordnance maps merging with the contour lines, and on the Hambleton Hills head lamp beams lit the sky at all points of the compass. Names familiar to "Yorkshire" competitors—Old Byland, Boltby, Little Blakey—came up on the route card. At the breakfast stop near Scarborough, the 2cv Citroen driven by J. E. Marchant and P. Diant had arrived, bravely flying a French tricolour.

Immediately after breakfast there was a jolly little climb up to Hackness moor, which involved tight hairpin bends, and



Ford in a ford, typifying the sort of conditions that prevailed throughout much of the 450-mile Yorkshire Rally: a competing Zodiac ploughs its way through

then away to Goathland and Rosedale. The snow had played havoc with the roads over the moors, and cars bounced and splashed their way through a surface which seemed to consist of thick yellow soup. By now many crews were running late; J. G. Allison's Vauxhall Victor was trailing its silencer and could be heard coming for miles. Suddards and Fisher, already an hour late near Pickering, were frustrated by a closed level crossing, and Bailey and Rhodes were delayed by damage to the front of their M.G. Magnette.

By midday the rain was pouring down, signposts were obscured by mist, and on the climb up to Summer Lodge from Swaledale the clouds came down. The Askrigg control was placed at a junction down which ran a young river; here Mrs. Einhorn's Austin A.55 splashed its way round the corner with a restyled front end, having met a solid object a little earlier.

North through the rain and mist, the route went to Muker and then finally turned south. There was a lot of water near Kilnsey, but most people got through to the finish at Ilkley. There were eight non-starters out of 122, and 22 failed to finish.

PROVISIONAL RESULTS

Scarborough Trophy and Replica (best performance): Austin-Healey 100-Six (T. A. Gold), 2.45 marks lost. Eric S. Myers Trophy and Replica (best performance in opposite class): Morris Minor 1000 (M. Sutcliffe), 25.04. Second Class: 1. up to 1,600 c.c., Morris Minor 1000 (P. Smith), 23.31; 2. over 1,600 c.c., Triumph TR3 (J. Wallwork), 4.48. Team Prize, Y.S.C.C. Rambler: Renault Dauphine (K. Lee), Renault Dauphine (D. Butterwick), M.G. A (R. J. Duck), 100.92. Ladies' Prize: Austin A.55 (Mrs. E. R. Einhorn), 94.51. Novices' Award: Morris Minor 1000 (A. J. Hallitt), 46.07. First-class Awards up to 1,600 c.c.: Renault Dauphine (D. Butterwick), 26.14; M.G. A (J. R. Crow), 29.13; Ford Anglia (E. J. B. Mitchell), 29.15; Borgward TS (J. P. Boardman), 32.01; M.G. A (R. J. Duck), 33.57; Renault Dauphine (K. Lee), 41.42; Volkswagen (B. R. Haddilove), 55.09; Hillman Minx (S. L. Hickling), 56.40. Over 1,600 c.c.: Triumph TR3 (J. C. Hanson), 11.49; Austin A.55 (Dr. J. K. Armstrong), 16.58; Ford Zephyr (M. D. Einhorn), 29.18; Sunbeam Talbot (J. H. Walker), 41.52; Austin-Healey 100-Six (B. Hirst), 46.42.

RIVERSIDE RALLY

HELD largely in the hours of darkness last Saturday-Sunday, the Hants and Berks M.C. Riverside Rally was, as ever, extremely efficiently run, and provided an unusually busy night's motoring for competitors. There were two "marked map" sections, for which competitors were given maps already showing the control points—though not the route from point to point; also included were an "Eight Clubs" section and one on which competitors had to record what was written on fingerposts around the route.

Altogether, 114 cars were entered for the rally; of these, 109 started and 90 finished the course. Winners were Sunley and Piggott in a new 1½-litre Sunbeam Rapier—so new that little over 300 miles showed on the odometer at the

start of the event at Ascot on Saturday evening. The finish, too, was at Ascot, at noon on Sunday.

PROVISIONAL RESULTS

Best Performance: Sunbeam Rapier (J. B. Sunley and T. A. M. Piggott). Class results: Class A: Standard Vanguard (D. Russell and C. Rogers); Class B: Riley 1.5 (D. E. Gunner and P. B. Clark); Class C: Wolseley 1.500 (G. F. Woodroffe and J. B. W. Wood). Team Award: M.G. Magnette (J. Bell and L. Sutcliffe), Standard Vanguard (D. Russell and C. Rogers) and Volkswagen (M. J. Harvey and Mrs. P. Edwards). Best Performance by a man-woman crew: Standard Vanguard (R. Witheyman and Miss P. Taylor). Best Performance by an all-woman crew: Morris Minor (Miss Pat Moss and Miss Ann Wisdom). Awards of Merit: Class A: Morris Minor 1000 (B. G. Norman and A. D. W. Thomson); Volkswagen (M. J. Crabtree and K. Levitt); Morris Minor 1000 (M. A. Stinn and P. Dennell). Class B: Hillman Minx (W. T. Alden and T. Winterbottom); M.G. Magnette (J. Higginson and Miss S. Eiden); M.G. Magnette (K. Hartridge and J. McFarland); M.G. Magnette (J. Bell and L. Sutcliffe); M.G. A (P. E. Still and R. G. Forster); M.G. Magnette (R. J. G. Smith and J. O'Orville). Class C: Austin A.105 (H. G. W. Kendrick and J. O. Clarke); Standard Vanguard (R. Witheyman and Miss P. Taylor).



The Sport

By PETER GARNIER



THE TARGA FLORIO, it seems, will take the place of the Mille Miglia as Italy's Sports Car Championship event this season. A ministerial commission in Italy has given its consent and approval, thereby lifting the ban on road racing events that has existed in Italy since last year's Mille Miglia—so, presumably, it is merely a matter, now, of getting the C.S.I.'s approval. The only snag is that the Nurburgring 1,000-km sports car race—which also counts towards the Championship—is fixed in the Calendar for 1 June, and the Targa (run last year as a regularity test) is set for 8 June, a week later. The C.S.I. lays down that there shall be at least a fortnight between events counting for this (or any other) championship, so the date of the Targa Florio will have to be changed.

There still seems to be some doubt as to the form the Mille Miglia will take. Last official announcement was that it would follow the usual route, but would be run as a sort of "poor man's Tour de France," with speed contests scattered along the route. Now, it seems, the organizers are to put further proposals to the Ministry of the Interior; some reports have it that the required speed on the road section is to be 70 m.p.h. It is possible, I suppose, that the date originally allocated to the Mille Miglia (11 May), as Italy's Championship-counting event, may now be given to the Targa Florio; it is difficult to see another date that does not clash with some big event.

STARTING POINTS for the Ulster A.C.'s Circuit of Ireland Rally (4 to 8 April) will be Belfast and Dublin. The event has been considerably stiffened up; much more night driving will be required than in previous years, and the first stage is to be very difficult indeed. After the two starting points, competitors will join the common route at Dundalk; the first control will be at Tramore, and there will be two driving tests between Tramore and Killarney. Two nights will be spent in Killarney before the rally heads north again, keeping to the west and passing through Galway, Donegal and Londonderry to the finish at Bangor, where the final tests will be held.

The rally is one of the events counting towards the British Trials and Rally Drivers' Association Gold Star.

AMONG THE DRIVERS entered for the Cuban Grand prix (sports cars; non-Championship; 24 February) is Cesare Perdisa, who has not raced since Castellotti's accident at Modena. Other entries include Fangio, Gregory, Behra, Schell, Scarlatti, Godia, Bonnier and Schelby in Maseratis; Trintignant, von Trips, Ruttman and, probably, Stirling Moss are down to drive Ferraris; Miéres and von Hanstein will drive a Porsche.

MERCEDES-BENZ are entering three cars for the East African Coronation Safari (3 to 7 April), one of which is to be driven by 1956 Monte Carlo Rally winner Ronnie Adams. It looks, therefore, as though he may not—through

shortage of time between the events—be able to compete in the R.A.C. Rally of Great Britain, which precedes it, or the Tulip, which comes afterwards.

THREE LOTUS ELEVENS have been prepared and entered by the works for the Sebring 12-hour sports car race on 22 March; they left the Lotus works for the docks last weekend.

John Dalton has joined the Aston Martin team for this race.

BY THE END of this month, Brian Lister will have exported somewhere around a dozen Lister sports cars to the States; some of these will be fitted with Jaguar engines, and some with Chevrolets—which weigh less than the Jaguar engine, cost about £350, and develop about 300 b.h.p., giving the car a top speed of 180 to 190 m.p.h. and a performance not far short of that of the fabulous 4½-litre Maserati . . . with General Motors' servicing in the background, and at a basic price of less than £2,000.

IT LOOKS as though the lead set by the association known as the Eight Clubs—which amalgamated to run joint events—may be catching on. Three clubs in the North—the South Shore M.C., Blackpool and Fylde M.C. and the Lytham St. Annes M.C.—have combined to form the Fylde Motor Sports Group, and will in future organize events as a group, instead of as separate clubs.

A few more amalgamations of this sort, resulting in fewer, but better supported and organized events, would greatly ease the present congested state of the British calendar.

PHOTOGRAPHED from irreplaceable originals, some extremely interesting films of pre-war racing were shown by the Bentley D.C. last week. They covered the 1930 Brooklands 500-mile and Tourist Trophy races, and the 1929 500-mile race, Le Mans and Irish Grand Prix; total running time was about an hour, and the films added up to some 1,600 feet. It was particularly interesting to see how well these cars appeared to handle, despite the tremendous advances in this field that have been made since those days; also interesting was the remarkably poor condition of the Sarthe circuit 29 years ago. If these rare records of bygone years are shown again, it will be well worth while going to see them.

ONE OF THE most hilarious parties of the winter, the Lloyds M.C. dinner was held at the Cafe Royal last Friday—and lived up to its reputation. According to tradition, the party was "stag," but not entirely without female influence this time; there was a quite remarkably good cabaret. Eric Thompson, in proposing "The Guests," drew attention to the many famous names in motor sport that have been—or are—connected with Lloyds: John Cobb, Sir Malcolm Campbell, R.R.C. ("Rob") Walker, Denis Poore, David Brown, and rallyists John Bremner and

Tony Oldsworth. Rodney Walkerley, in considerably less serious vein, proposed the health of "The Club."

IN THEIR preliminary announcement, the Vacuum Oil Company say that the 1958 version of the Mobilgas Trial will start at Sydney and, after running clockwise round Australia, will return to pass through Sydney en route for the finish at Melbourne. Total distance will be a little over 1,000 miles; the event will start on 20 August and finish, 18 days later, on 7 September. Prize money will be around £A16,000; entries will open on 15 April.

PRE-WAR FOLLOWERS of the sport—particularly at Brooklands—will be sorry to hear that R. F. Oats, regular competitor in Ansaldo, O.M. and, later, Alvis, has undergone a serious operation in Penzance hospital; he is now progressing well, though slowly. His name will also be remembered for his association with the Lammis-Graham car, and the fact that "Wilkie" Wilkinson served his time under Fred Oats.

BELGIUM'S Liège-Brescia-Liège (for miniatures, or bubble-cars) is not to go through France. The event is to be held on 17-20 July, which falls during a period when all road events are forbidden by the French Ministry of the Interior.

IN RECOGNITION of its Silver Jubilee year, the fiftieth Lands End Trial (4 and 5 April) is to be run in conjunction with a Vintage version, for members of the Vintage Sports Car Club and the Vintage Motor Cycle Club; the two trials will be run concurrently, but the route for the older vehicles will be the one they used to use in their heyday.

COMING SHORTLY

- FEBRUARY 22-23.**—Bolton-le-Moors C.C. Bolton Rally, either E. Bulloughs, Ltd., Manchester Road, Bolton, Lancashire, or Tom Byatt, Ltd., Stoke-on-Trent, Staffordshire, 9 p.m.
- 22-23.**—Guildford M.C. Six-Hour night rally (closed), Newlands Corner, 8 p.m.
- 22-23.**—Mid-Cheshire M.C. Birt Trophy rally (restricted), Rootes, Ltd., North Side, Sale, 10 p.m.
- 22-23.**—Oxford University M.D.C. Fourth Targa Rusticana, Bury Barns, Burford, Oxfordshire, 7 p.m.
- 22-23.**—West Essex C.C. Clover Leaf night rally.
- 22-23.**—West Hants and Dorset C.C. Moon-fleet rally and tests (closed), lay-by adjacent to Dear Bros. Garage, West Moor, 1 p.m.
- 23.**—Huddersfield M.C. Jack Leslie Ellis Memorial trophy trial.
- 23.**—M.G. C.C. (S.E. Centre). Signpost rally (closed), Sugar Bowl, Burgh Heath, Surrey, 1 p.m.
- 23.**—Middlesex County A.C. Winter rally, Bullsmoor Lane, Enfield, 10.30 a.m.
- 23.**—Waterloo and District M.C. Rally (closed), Bay Horse, Formby, near Liverpool, 10 a.m.
- 23.**—Fiat 500/600 Club. City quiz run, Lincoln's Inn Fields, W.C.2, 2 p.m.
- 23.**—Chiltern C.C. Committee Cup trial, public car park, opposite Griffin Hotel, Amersham, Buckinghamshire, 10.30 a.m.
- 24-2 MARCH.**—Ninth International Sebring Rally, Italy.
- 1-2.**—A.C.O.C. Night Rally, Buckland, Berks, 10 p.m.
- 2.**—Yorkshire S.C.C. White Rose sporting trial, Ringways, Whitehall Road, Leeds, 10.30 a.m.
- 2.**—Loughborough College M.C. Day rally, College grounds, Loughborough, 10.30 a.m.
- 2.**—Liverpool M.C. Rally (closed).
- 2.**—Surrey Sporting M.C. Sixth annual sprint, Brands Hatch, 12.30 p.m.
- 11-15.**—R.A.C. Rally of Great Britain.
- 22.**—Sebring 12-hour sports car race.

Like the "Exeter," which no longer runs from London to Exeter, the Lands End will not finish at Lands End this time—a change which, in my opinion, is a great pity. The enthusiasm for this event in the West Country has always been considerable. Instead, the event is to finish at Newquay, and the inhabitants of Portreath, Gwethian, Hayle, Penzance and points west will no longer see the cars go by.

Regulations are available, and entries close on Monday, 10 March. Large numbers of officials are required; volunteers should write—as should those who want regulations—to J. A. Masters, The M.C.C., 76, Kinnerton Street, Knightsbridge, London, S.W.1.

MORE RACE EXCURSIONS: Quo Vadis Tours are organizing outings to the Monaco Grand Prix and Le Mans (18 May, and 21-22 June). The Monaco trip will depart on 16 May at 23.10 and arrive at Nice at 01.45; the return trip leaves at 03.00 on 19 May and arrives at 05.55. First-class hotel accommodation has been arranged and the whole thing costs £39 15s.

Three separate arrangements have been made for Le Mans, the difference being, so far as price is concerned, thus: £19 10s, and £21 15s; there are two alternatives at the latter figure. Full details of these excursions can be obtained from Quo Vadis Tours, Ltd., 21, Maddox Street, London, W.1.

RACE AND RALLY REGULATIONS RECEIVED

Harrow C.C.—Harrow Rally and Heston Driving Tests, 8-9 March. Invited clubs: Cemian, Hants and Berks, M.G.C.C., Brent Vale M.C., Anglia and Prefect O.C., Mid-Thames C.C., Circle C.C., Blackfriars M.C., and Essex Police Advanced Driving Wing. Approximately 260 miles of night navigation; entries in four classes, and limited to 75. Regulations from L. S. D. Loveday, Weirfield, Ducks Hill, Northwood. Entries close 3 March.

Midlands M.E.C.—A night navigational exercise of four hours' duration, 1-2 March, closed to club. Starting from Fleur-de-Lys, Lowsonford, at 11 p.m. and finishing at approximately 3 a.m. about ten miles from Birmingham. Entry forms from L. Hill, 100, Prospect Lane, Solihull, Warwickshire.

Wolverhampton and South Staffs C.C.—Express and Star night navigation rally, to be held on March 8-9; starting points at Liverpool, Newark, Oxford, Hereford and Wolverhampton; total distance approximately 400 miles, finishing at the Wulfrun Hall, Wolverhampton, early on the Saturday morning. Entries close on 25 February.

Falcon M.C.—March Hare trial, Sunday, 23 March, starting at 11 a.m. from Hatfield and Royston, and finishing at approximately 3.30 p.m. at Woolmer Green, Hertfordshire. Invited clubs: Bedford M.C.C., Cambridge 50, Cemian, Chiltern, East Anglian, Harrow, Haslemere, London, M.G., M.C.C., North London Enthusiasts, Stroud and D., 750, and Thames Estuary. Further details available from: H. W. Tucker-Peake, Shelford and Crowe, Ltd., Stevenage, Hertfordshire.

CLUB NEWS

Folkestone and East-Kent C.C.—Newly formed, to meet the need for a club in this district, the Folkestone and East-Kent C.C. is to hold its first general meeting at the East Cliff Pavilion, Folkestone, on Wednesday, 26 February, starting at 7.15 p.m. There will be a programme of motoring and general interest films. Invitation tickets can be obtained, together with information about the Club, from L. Camplin, 6, Boscombe Road, Folkestone.

Warrington and District M.C.—Results of the Daffodil rally, held on 9 February, are as follows:

Best Performance: Renault Dauphine (F. A. and Mrs. Marsh), 640 marks lost. **Closed cars, Class A (up to 1,500 c.c.):** 1. Wolseley (H. Greenwood and J. Forester), 980. **Class C (over 1,500 c.c.):** 1. Austin A.95 (J. M. Hyde and J. D. Haggie), 1,460. **Open cars, Class B (up to 1,500 c.c.):** 1. M.G. TD (R. J. Smith and H. Gallimore), 3,390. **Class D (over 1,500 c.c.):** 1. Triumph TR2 (K. Liptrop and J. Middleton), 1,750. **Best Novice:** Standard (M. A. Pochin and D. J. Johnstone), 1,520. 56 cars entered, 47 started, 16 retired.

Surrey Sporting M.C.—The Sixth annual sprint meeting will be held at Brands Hatch on Sunday, 2 March; practice starts at 8.30 and the event itself at 12.30. Entries will be in the following classes: 1, 750 Formula; 2, 1,172 Formula; 3 to 12, Normal capacity classes, open and closed; 13, Unlimited sports cars, manufactured before 1940. This year the committee has decided to charge for the car park, at the rate of 5s for cars and 2s for motor cycles; admission to the grandstand will be 2s. It is hoped that the sporting fraternity will not object to thus assisting to keep a small club going!

Entries are coming in well, and so far include Ian Raby and Peter Gammon.

Thames Estuary A.C.—Since the account of the Cats Eyes Rally was published in the issue of 14 February, there have been one or two revisions in the results. The affected sections are these:

Category 4, Class C: 1. Triumph TR3 (A. Newsam and P. Dingley), 50; 2. Acacia-Bristol (J. B. Shingle), 90; 3. Morgan (Mrs. E. P. Mayman and Miss E. V. J. Domleo), 115. **Category 5:** 1. Renault Dauphine (B. Harper and J. G. Heard), 5; 2. Austin A.35 (A. T. Fisher), 20; 3. Ford 100E (W. H. Morgan), 70.

Fylde Motor Sports Group.—This newly formed association, made up of the South Shore M.C., Blackpool and Fylde M.C. and the Lytham St. Annes M.C., is to run an Annual Moonlight Rally on 29-30 March. Clubs from all over the north-west have been invited, and the route will cover approximately 200 miles at night. There will be map-reading sections, and a regularity section whereon competitors will be timed to half-a-minute early or late; there will also be six driving tests.

Further particulars can be obtained from R. Feeley, Leopold Grove Engineering Co., Ltd., 1, Blundell Street, Blackpool.

Cambridge University A.C.—Results of the 1958 Mini Monte were as follows:—

1. DKW (P. Copeman), 18 penalty points. (Sprint time 36.9 sec). 2. Standard 8 (H. J. Ten Bruggen Cate), 17 (49). 3. Zodiac (J. Reynolds), 36 (36.3). 4. A.C. Bristol (H. V. White Smith), 37 (30). 5. Standard 10 (J. D. Scott), 41 (39.9). 6. Standard Vanguard (C. H. Threlfall), 49 (37).

Romford Enthusiasts C.C.—Results of the Clockwatchers Rally were as follows:—

1. Wolseley 6/80 (C. S. Perkins), 97 marks lost. 2. Ford Prefect (R. Hutchinson), 118. 3. Ford Consul (G. Upson), 175. 4. M.G. Magnette (R. Ager), 206. 5. 2.4 Jaguar (G. Hill), 391. 6. and Novices Award, Morris Minor (J. Stubbing), 446.

Lothian C.C.—Provisional results of the Gymkhana held at Riccarton Estate on 9 February were as follows:—

Class I, Closed: Ford Anglia (J. S. McCaig), 333.3 marks. **Class II, Open:** M.G. A (D. Paterson), 369.3. **Closed:** Ford Consul (E. Herrald), 362.4. **Class III, Open:** Triumph TR3 (D. Bertram), 347.7. **Closed:** Ford Zodiac (W. Malcolm), 501.9.

Plymouth M.C.—Results of the Anon Trophy, held on 9 February and first qualifying event for the 1958 Mercury Trophy, were as follows:

1. Ford Prefect (G. H. Turnbull), 2. Dellow (G. Edwards), 3. Morris Isis (— Goodwin).

Veteran Car Club.—Under the heading "Prolific Fixture List," a summary of the Club's 1958 programme was published in the issue of 7 February. The V.C.C. writes to say that the Brands Hatch fixture, down for 26 April, should not have been included. On this date there will be the Opening Event, a rally to Luton Hoo House, followed by a concours d'élegance.

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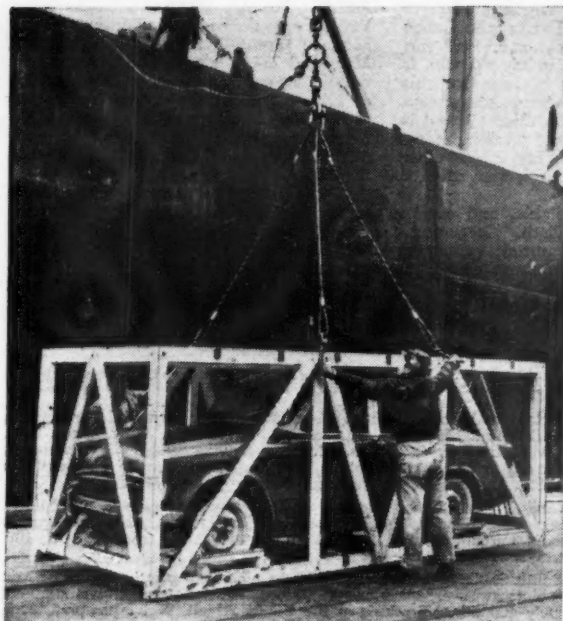
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Collapsible skeleton packing crates—largely pioneered by the Rootes Group—are being used by British car exporters owing to the shortage of North Atlantic shipping. The system cuts costs and nearly doubles the car-carrying capacity of a normal vessel. Cars are driven into the crates at the dockside, stowed in two tiers with a third, un-boxed tier on top of them; after unloading in the U.S.A. the crates are collapsed and returned for future use.

Trade and



Industry

The National Benzole Co., Ltd., of Buckingham Gate, London, S.W.1, have appointed Mr. Sydney Tindale as marketing manager.

The death is recorded with regret of Mr. Alexander Edwards Hykins, founder and former managing director of the E.N.V. Engineering Co., Ltd., Hythe Road, Willesden, London, N.W.10.

Mr. J. C. Gillam, London representative of the Staffordshire company, Everure Accessories, Ltd., is making a successful recovery following a recent operation. He expects to be active once more within a few weeks.

For some years S. Norrish, Ltd., have been sole distributors of Drok lubricators. The company has now acquired the entire share capital of Drok Lubricators, Ltd., and the registered office therefore becomes 220, Great Portland Street, London, W.1.

Jaguar sales and service weeks will be held commencing on the following dates: 3 March, Imperial Motor Mart, Cheltenham, Gloucestershire; Rossleigh, Ltd., Dundee. 6 March, Hough and Whitmore (Glos.), Ltd., Gloucester. 10 March, Rossleigh, Ltd., Stirling; Michael Christie Motors, Aylesbury. 17 March, Dumbuck Garage, Bowling, Dunbartonshire; Murkett Brothers, Ltd., Bedford. 24 March, David Blane and Son, Ltd., Paisley, Scotland; Willetts (Eastbourne), Ltd., Eastbourne. 31 March, The S.M.T. Sales and Service Co., Ltd., Dumfries; Tourist Trophy Garage, Ltd., Farnham, Surrey. In some cases the facilities will not be available for a full week, and enquiries should be made from the companies concerned.

Mr. Edward Hinchliffe Brook has been appointed chief chemist by Small and Parkes, Ltd., Manchester, 9, manufacturers of Don brake and clutch linings.

After being general representative for the Dunlop Rubber Co., Ltd., in Worcestershire since 1953, Mr. Leonard Blake has been appointed assistant district manager for southern Birmingham.

Spurling Motor Bodies, Ltd., have opened new service and parts departments in New Inn Yard, adjacent to their recently finished showrooms in Shore-ditch High Street, London, N.1.

Mr. D. Frederick has been appointed chief inspector of safety glass by the Triplex Safety Glass Co., Ltd., of London, Birmingham and St. Helens. He was previously chief quality inspector of bodywork within the Austin Motor Co., Ltd., and will now be resident at the Kings Norton, Birmingham, Triplex plant.

Information Sought

Correspondence, addressed c/o *The Autocar*, can be forwarded on behalf of readers seeking the following handbooks and information:

- No. 17408. Peugeot 203
- "M.J.J."—All possible information.
- No. 17409. 1958 328 c.c. Berkeley
- "A.T.R.B."—General running experiences.
- No. 17410. Handbooks Required
- "H.G.R." Daimler E.20.
- "L.D.S."—1938 Ford Eight; or a workshop manual.
- "D.W.D."—1934 M.G. Magnette; or a workshop manual.
- "R.T.B."—20-25 h.p. Rolls-Royce, unabridged version.
- "W.S."—1939 Sunbeam-Talbot Ten workshop manual.

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A.C.						
Ace	1,188	0	0	1,783	7	0
Ace-Bristol	1,443	0	0	2,165	17	0
Acoca	1,446	0	0	2,170	7	0
Acoca-Bristol	1,700	0	0	2,551	7	0
ALFA ROMEO						
Giulietta Berlina	1,320	0	0	1,981	7	0
Giulietta T I	1,460	0	0	2,191	7	0
Giulietta Veloce	1,945	0	0	2,918	17	0
1900 Super	1,695	0	0	2,543	17	0
Super Sprint	2,450	0	0	3,676	7	0
ALLARD						
Palm Beach (Ford)	1,050	0	0	1,576	7	0
Palm Beach (Jaguar)	1,300	0	0	1,951	7	0
Gran Turismo	1,700	0	0	2,551	7	0
ALVIS						
Grabber	2,300	0	0	3,451	7	0
Grabber convertible						
A-SIDDELEY						
Sapphire 346	1,100	0	0	1,651	7	0
(automatic)	1,195	0	0	1,793	17	0
Limousine	1,910	0	0	2,866	7	0
(automatic)	2,099	0	0	3,149	17	0
ASTON MARTIN						
DB Mk. III	2,050	0	0	3,076	7	0
Drophead coupé	2,300	0	0	3,451	7	0
ASTRA						
Utility	308	0	0	471	16	0
AUSTIN						
A.35 2-door	379	0	0	569	17	0
2-door de luxe	387	15	0	582	19	6
A.35 4-door	396	10	0	596	2	0
4-door de luxe	400	0	0	601	7	0
A.35 Countryman	444	0	0	667	7	0
A.55	538	0	0	808	7	0
A.55 de luxe	570	0	0	856	7	0
A.95 Westminster	689	0	0	1,034	17	0
A.95 de luxe	719	0	0	1,079	17	0
A.95 Countryman	834	0	0	1,252	7	0
A.105	823	0	0	1,235	17	0
(automatic)	885	10	0	1,329	12	0
AUSTIN-HEALEY						
100-Six	817	0	0	1,226	17	0
BENTLEY						
Series S	3,695	0	0	5,543	17	0
L.W.B.	4,595	0	0	6,893	17	0
Freestone and Webb	5,187	0	0	7,781	17	0
Hooper	4,990	0	0	7,486	7	0
H. J. Mulliner	5,455	0	0	8,183	17	0
James Young	4,915	0	0	7,373	17	0
Continental						
H. J. Mulliner	5,275	0	0	7,913	17	0
Four-door	5,355	0	0	8,033	17	0
Park Ward	4,995	0	0	7,493	17	0
BERKELEY						
Two-seater 328 c.c.	332	7	6	499	18	3
492 c.c.	381	15	4	573	19	10
492 c.c. hardtop	397	14	7	597	18	11
B.M.W.						
501	1,638	0	0	2,458	7	0
502 2.6-litre	1,792	0	0	2,687	7	0
502 3.2-litre	2,220	0	0	3,381	7	0
503	3,200	0	0	4,801	7	0
507	2,800	0	0	4,201	7	0
BORGWARD						
Isabella	830	0	0	1,246	7	0
Isabella estate car	880	0	0	1,321	7	0
Touring Sport	950	0	0	1,426	7	0
TS coupé	1,330	0	0	1,996	7	0
Hansa 2400	1,500	0	0	2,251	7	0
BRISTOL						
405	2,390	0	0	3,586	7	0
405 Convertible	2,450	0	0	3,767	7	0
BUICK						
63 Century	2,175	0	0	3,263	17	0
CADILLAC						
6309 Fleetwood	3,425	0	0	5,138	17	0
6239D sedan de ville	3,125	0	0	4,689	17	0
CHEVROLET						
Bel-Air	1,410	0	0	2,116	7	0
Bel-Air Sport	1,440	0	0	2,161	7	0
Bel-Air convertible	1,555	0	0	2,333	17	0
Nomad estate car	1,500	0	0	2,251	7	0
Corvette	1,906	0	0	2,860	7	0
CHRYSLER						
300C	2,740	0	0	4,111	7	0
300C convertible	2,960	0	0	4,441	7	0
Imperial	2,885	0	0	4,328	17	0
Crown	3,045	0	0	4,568	17	0
CITROEN						
2 c.v.	389	0	0	598	7	0
DS19	1,150	0	0	1,726	7	0
CONTINENTAL						
Mark II coupé	4,900	0	0	7,351	7	0
DAIMLER						
Century II	1,119	2	0	1,680	0	0
One-O-Four	1,595	15	4	2,395	0	0
DK400A	2,795	15	4	4,195	0	0
DK400B	2,875	15	4	4,315	0	0
Hooper limousine	4,385	0	0	6,578	17	0
D.B.						
Billy HBR 5	1,299	2	0	1,950	0	0
DELLOW						
Mark IIC sports	465	0	0	698	17	0
Mark IIE sports	500	0	0	751	7	0
Mark V lightweight	525	0	0	788	17	0

(continued overleaf)

	£	s	d	£	s	d
D.K.W.						
Fixed-head coupé	765	0	0	1,148	17	0
Four-door	798	0	0	1,198	7	0
Universal estate car	830	0	0	1,246	7	0
1000 fixed-head coupé	850	0	0	1,276	7	0
DODGE						
Custom Royal	2,040	0	0	3,061	7	0
EDEL						
Pacar	1,741	8	0	2,613	9	0
Citation hardtop	2,165	12	0	3,249	15	0
FACEL VEGA						
FVS hardtop	3,150	0	0	4,726	7	0
(automatic)	2,980	0	0	4,471	7	0
FAIRTHORPE						
Automata	426	0	0	640	7	0
Electron Minor	479	0	0	719	17	0
Electron	769	0	0	1,154	17	0
FIAT						
500	350	0	0	526	7	0
500 de luxe	370	0	0	556	7	0
600	432	0	0	649	7	0
600 convertible	452	0	0	679	7	0
Multipla 4/5	532	0	0	799	7	0
Multipla 6	540	0	0	811	7	0
1100	578	10	0	869	2	0
1200 models						
1400B	774	0	0	1,162	7	0
1901B	980	0	0	1,471	7	0
1900B four-light	1,385	0	0	2,078	17	0
FORD						
Popular	295	0	0	443	17	0
Anglia	380	0	0	571	7	0
Anglia de luxe	400	0	0	601	7	0
Prefect	415	0	0	623	17	0
Prefect de luxe	438	0	0	658	7	0
Escort	434	0	0	652	7	0
Squire	463	0	0	695	17	0
Consul	545	0	0	818	17	0
Consul de luxe	580	0	0	871	7	0
Consul convertible	660	0	0	991	7	0
Consul estate car	710	0	0	1,066	7	0
Zephyr	610	0	0	916	7	0
(automatic)	725	0	0	1,088	17	0
Zephyr convertible	778	0	0	1,168	7	0
Zephyr estate car	775	0	0	1,163	17	0
Zodiac	675	0	0	1,013	17	0
(automatic)	790	0	0	1,186	7	0
Zodiac convertible	873	0	0	1,310	17	0
Zodiac estate car	845	0	0	1,268	17	0
FORD (Canadian)						
Custom 300	1,307	0	0	1,961	17	0
Fairlane 500 Town	1,377	0	0	2,066	17	0
500 Town Victoria	1,409	0	0	2,144	17	0
Ranch Wagon	1,362	0	0	2,044	7	0
FORD (Germany)						
12M	702	0	0	1,054	7	0
15M	763	0	0	1,145	17	0
17M						
FRAZER NASH						
Gran Turismo	2,166	0	0	3,250	7	0
Sabring	2,166	0	0	3,250	7	0
GOGGOMOBIL						
T.300	329	0	0	494	17	0
T.400	342	6	0	514	16	0
TS.302	416	0	0	625	7	0
TS.400	428	13	4	644	7	0
TS.300 convertible	458	0	0	688	17	0
TS.400 convertible	471	0	0	707	17	0
HILLMAN						
Minx II Special	498	0	0	748	7	0
Minx II de luxe	529	0	0	794	17	0
Two-tone	539	0	0	809	17	0
Minx II convertible	598	0	0	898	7	0
Minx II estate car	625	0	0	938	17	0
Husky	465	0	0	698	17	0
HUDSON						
Rambler de luxe	1,250	0	0	1,876	7	0
Rambler Super	1,285	0	0	1,928	17	0
Estate car	1,375	0	0	2,063	17	0
Rambler Custom	1,350	0	0	2,026	7	0
Ambassador Super	1,630	0	0	2,446	7	0
Custom	1,700	0	0	2,551	7	0
Estate car	1,795	0	0	2,693	17	0
HUMBER						
Hawk II	840	0	0	1,261	7	0
(automatic)	955	0	0	1,433	17	0
Hawk II estate car	975	0	0	1,463	17	0
Touring limousine	920	0	0	1,381	7	0
ISETTA (Gt. Britain)						
300	255	1	8	389	19	6
Luxury Plus	265	15	0	399	19	6
600	319	0	0	479	17	0
JAGUAR						
2.4	966	0	0	1,495	7	0
Special equip. model	1,019	0	0	1,529	17	0
3.4	1,114	0	0	1,672	7	0
XK 150 hardtop	1,175	0	0	1,763	17	0
(automatic)	1,303	0	0	1,955	17	0
Special equip. model	1,292	0	0	1,939	7	0
Convertible	1,195	0	0	1,793	17	0
XK SS						
Export only						
Mark VIII	1,219	0	0	1,892	17	0
(automatic)	1,331	0	0	1,997	17	0

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U.K. List Price * With Tax

JENSEN	£	s	d	£	s	d
541	1,435	0	0	2,153	17	0
541 de luxe	1,750	0	0	2,626	7	0
541 R	1,910	0	0	2,866	7	0
Interceptor	1,800	0	0	2,701	7	0
LAGONDA						
3-litre	1,995	0	0	2,993	17	0
LANCIA						
Appia Series II	1,125	0	0	1,668	17	0
Aurelia Gran Turismo	2,230	0	0	3,346	7	0
Flaminia	2,500	0	0	3,751	7	0
LINCOLN						
Capri	2,682	0	0	4,024	7	0
Première	2,910	0	0	4,336	7	0
LLOYD						
LP 600	390	0	0	586	7	0
LC 600 Cabrio	427	0	0	641	17	0
LS 600 Combi	405	0	0	608	17	0
LOTUS						
Seven	690	0	0	1,036	7	0
Elite	1,300	0	0	1,951	7	0
Sports	1,021	0	0	1,511	7	0
Club	1,309	0	0	1,937	7	0
Le Mans 75	1,625	0	0	2,405	4	0
MEADOWS						
Frisky	299	0	0	449	17	0
Friskysport	322	0	0	434	7	0
MERCEDES-BENZ						
180	1,195	0	0	1,793	17	0
180D (diesel)	1,295	0	0	1,889	17	0
190	1,250	0	0	1,876	7	0
190SL	1,930	0	0	2,896	7	0
219	1,430	0	0	2,146	7	0
220S	1,595	0	0	2,393	17	0
300 automatic	3,600	0	0	5,401	7	0
300SL Roadster	3,750	0	0	5,626	7	0
MERCURY (American)						
Monterey Fordor	1,634	0	0	2,452	7	0
Montclair Fordor	1,893	0	0	2,840	17	0
Phaeton	1,924	10	0	2,889	2	0
Convertible	1,979	0	0	2,969	17	0
MERCURY (Canadian)						
Monterey Fordor	1,481	0	0	2,222	17	0
Monterey Phaeton	1,640	0	0	2,461	7	0
Montclair Fordor	1,716	0	0	2,575	7	0
Montclair Phaeton	1,765	0	0	2,648	17	0
METROPOLITAN						
Hardtop	498	10	0	749	2	0
Convertible	516	0	0	775	7	0
M.G.						
A	663	0	0	995	17	0
Hardtop	724	0	0	1,087	7	0
Magnette	714	0	0	1,072	7	0
MORGAN						
4/4 Series II	498	0	0	748	7	0
Competition	550	0	0	826	7	0
Plus 4 (TR) 2-seater	645	0	0	968	17	0
Convertible	693	0	0	1,040	17	0
2-seater (Vanguard)	594	0	0	892	7	0
Convertible	641	0	0	962	17	0
MORRIS						
Minor 1000 2-door	416	0	0	625	7	0
2-door de luxe	433	10	0	651	12	0
4-door	441	0	0	662	17	0
4-door de luxe	462	0	0	694	7	0
Minor Tourer	415	0	0	625	7	0
Minor Tourer de luxe	433	0	0	651	12	0
Minor Traveller	471	10	0	708	12	0
Minor Traveller de luxe	488	10	0	734	2	0
Cowley	555	10	0	834	12	0
Oxford III	589	0	0	884	17	0
Oxford Traveller	665	0	0	999	17	0
Isis II	607	0	0	911	17	0
(automatic)	712	0	0	1,069	7	0
Isis II de luxe	650	0	0	961	7	0
Isis Traveller	725	10	0	1,089	12	0
NASH						
Rambler Custom	1,350	0	0	2,026	7	0
Rambler Custom S.W.	1,440	0	0	2,161	7	0
Ambassador Vee-8						
Custom	1,700	0	0	2,551	7	0
Custom S.W.	1,795	0	0	2,693	17	0
OLDSMOBILE						
88	1,820	0	0	2,731	7	0
Super 88	1,965	0	0	2,948	17	0
98	2,260	0	0	3,391	7	0
PACKARD						
4-door Sedan	1,680	0	0	2,521	7	0
Station Wagon	1,745	0	0	2,623	17	0
Hawk Hardtop	2,004	0	0	3,007	7	0
PANHARD						
Dyna Grand Standing	702	8	8	1,055	0	0
Convertible	1,032	8	8	1,550	0	0
PEERLESS						
G.T. 2-litre	998	0	0	1,498	7	0
PEUGEOT						
203	633	9	1	952	8	2
403	796	2	11	1,195	11	5
403 station wagon	865	0	0	1,298	17	0
PLYMOUTH						
Savoy Vee-8	1,718	0	0	2,578	7	0
Belvedere Convertible	1,790	0	0	2,686	7	0
Savoy Suburban	1,915	0	0	2,773	17	0
Fury	1,890	0	0	2,971	7	0
PONTIAC						
Chieftain Catalina	1,980	0	0	2,971	7	0
Bonneville Custom	2,300	0	0	3,461	7	0
Super Chief Catalina	2,040	0	0	3,061	7	0
Star Chief Catalina	2,150	0	0	3,226	7	0

PORSCHE	£	s	d	£	s	d
346A/1600 fixed head	1,300	0	0	1,996	7	0
Hardtop (detachable)	1,450	0	0	2,176	7	0
Cabriolet (detachable)	1,490	0	0	2,236	7	0
356A/1500 fixed head	2,100	0	0	3,151	7	0
Hardtop Carrera	2,220	0	0	3,331	7	0
Cabriolet Carrera	2,260	0	0	3,391	7	0
PRINCESS						
IV	2,250	0	0	3,376	7	0
IV limousine	2,360	0	0	3,541	7	0
L.W.B.	2,150	0	0	3,226	7	0
L.W.B. limousine	2,150	0	0	3,226	7	0
RENAULT						
750	437	0	0	656	17	0
Dauphine	530	0	0	796	7	0
(Ferlic clutch)	555	10	0	834	12	0
Frégate de luxe	894	10	0	1,343	2	0
Domaine estate car	894	10	0	1,343	2	0
Grand Pavois Trans- fluide	1,027	10	0	1,542	12	0
RILEY						
One-point-five	575	0	0	863	17	0
Two-point-six (automatic)	940	0	0	1,411	7	0
	1,045	0	0	1,568	17	0
ROLLS-ROYCE						
Silver Cloud	3,795	0	0	5,693	17	0
Limousine	4,595	0	0	6,893	17	0
Freestone and Webb	5,282	0	0	7,924	7	0
Freestone and Webb convertible	5,495	0	0	8,243	17	0
Hooper	5,085	0	0	7,628	17	0
H. J. Mulliner	5,550	0	0	8,326	7	0
James Young	5,010	0	0	7,517	7	0
Silver Wraith						
Freestone and Webb						
limousine	5,638	0	0	8,458	7	0
Freestone and Webb 7- passenger limousine	5,752	0	0	8,629	7	0
Park Ward	5,495	0	0	8,243	17	0
Park Ward 7-passenger limousine	5,085	0	0	8,708	17	0
H. J. Mulliner	5,625	0	0	8,438	17	0
Hooper limousine	5,580	0	0	8,371	7	0
Hooper 7-passenger	5,805	0	0	8,708	17	0
James Young	5,680	0	0	8,521	7	0
ROVER						
60	883	0	0	1,325	17	0
75	963	0	0	1,445	17	0
90	999	0	0	1,499	17	0
105S	1,088	0	0	1,633	7	0
105R	1,124	0	0	1,687	7	0
105R de luxe	1,155	0	0	1,733	17	0
Land-Rover estate car						
S.W.B.	750	0	0	1,058	17	0
S.W.B. Diesel	805	0	0	1,208	17	0
L.W.B.	815	0	0	1,223	17	0
SIMCA ARONDE						
1300 Elysée	592	0	0	889	7	0
Montlhéry	616	0	0	925	7	0
Grande Large (Flash)	665	0	0	998	17	0
Grande Large (Special)	692	0	0	1,039	7	0
SIMCA VEDETTE						
Beaulieu	965	10	0	1,449	12	0
SINGER						
Gazelle	598	0	0	898	7	0
Convertible	665	0	0	998	17	0
Estate Car	695	0	0	1,043	17	0
SKODA						
440	575	0	0	863	17	0
460	625	0	0	938	17	0
STANDARD						
Eight	425	0	0	637	17	0
Super Ten	435	0	0	653	17	0
Pennant	485	0	0	728	17	0
Companion estate car	495	0	0	743	17	0
Ensign	599	0	0	899	17	0
Vanguard III (automatic)	675	0	0	1,013	17	0
Estate car	790	0	0	1,186	7	0
Sportsman	765	0	0	1,148	7	0
STUDEBAKER						
Scotsman 2-door	820	0	0	1,231	7	0
Estate car	1,130	0	0	1,696	7	0
Commander 2-door	1,240	0	0	1,861	7	0
President 2-door	1,400	0	0	2,101	7	0
SUNBEAM						
Rapier	1,490	0	0	2,236	7	0
Convertible	695	0	0	1,043	17	0
TRIUMPH						
TR3	735	0	0	1,103	17	0
Hardtop	699	0	0	1,049	17	0
TURNER						
A-35 Sports	734	0	0	1,102	7	0
VAUXHALL						
Victor	5					
Rapier Super	498	0	0	748	7	0
Fellow	520	0	0	781	7	0
Cresta II	655	0	0	1,017	7	0
	715	0	0	1,073	17	0
VOLKSWAGEN						
Standard saloon	435	0	0	653	17	0
De luxe	505	0	0	758	17	0
Convertible	682	10	0	1,025	2	0
Karmann-Ghia coupé	822	10	0	1,235	2	0
WOLSELEY						
500	530	0	0	796	7	0
1700een-fifty	660	0	0	991	7	0
(automatic)	695	0	0	1,017	7	0
ix-ninety III	850	0	0	1,276	7	0
(automatic)	955	0	0	1,433	7	0

